

235 k-8
Dedicated, by permission, to
HIS MAJESTY,

FLORA RUSTICA:

EXHIBITING

ACCURATE FIGURES OF SUCH PLANTS AS ARE
EITHER USEFUL OR INJURIOUS IN

HUSBANDRY.

DRAWN AND ENGRAVED BY

FREDERICK P. NODDER,

BOTANIC PAINTER TO HER MAJESTY,

AND COLOURED UNDER HIS INSPECTION.

WITH

SCIENTIFIC CHARACTERS, POPULAR DESCRIPTIONS,
AND USEFUL OBSERVATIONS,

BY

THOMAS MARTYN, B.D. and F.R.S.

FELLOW OF THE LINNEAN SOCIETY,

AND

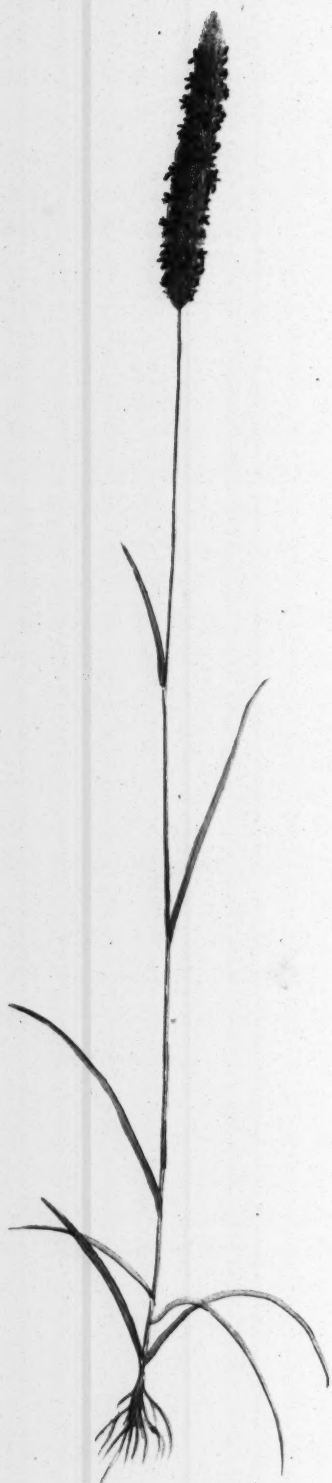
REGIUS PROFESSOR OF BOTANY IN THE UNIVERSITY
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ANTHEMIS.

SYNGENESIA *Polygamia Superflua.*

GENERIC CHARACTER.

Calyx hemispherical, nearly equal. *Florets* of the ray more than five. *Down* to the seed none. *Receptacle* chaffy.

SPECIES.

Anthemis arvensis. *Corn Chamomile.*

Lin. spec. 1261. *Huds. angl.* 373. *Wither. arr.* 937.
Hall. belv. n. 103. *Scop. carn. n.* 1091. *Pollich
 pal. n.* 816. *Leers herb. n.* 666. *Krock. files.
 n.* 1435.

Chamæmelum inodorum. *Baub. pin.* 135.
Raii syn. 185. *Petiv. brit. t.* 19. f. 8.

SPECIFIC CHARACTER.

Receptacles conical, *chaffs* lanceolate, *feeds* crown-margined, *leaves* somewhat villose.

DESCRIPTION.

ROOT hard and woody. The whole plant is hoary, or slightly woolly. Stems numerous, slender, hard, but flexible, branched, striated, pale green, with sometimes a tinge of red.

Leaves pinnate, sessile; midrib broad; pinnae either pinnate, or only jagged, sea green, terminated by semi-transparent, conical, sharp points. Peduncles hairy, thickening below the calyx. Scales of the calyx ovate, or ovate-lanceolate, somewhat hairy, with a green line along the back, and membranaceous edges. Florets of the ray white, elliptical, four or five lines in length, with two or three teeth at the end. Florets of the disk have a greenish tube, with a yellow border, bent back. Chaffs lanceolate, acuminate, keeled, as long as the florets. Seeds quadrangular, smooth, slightly furrowed, narrowest at the base, crowned with a blunt margin*.

OBSERVATIONS.

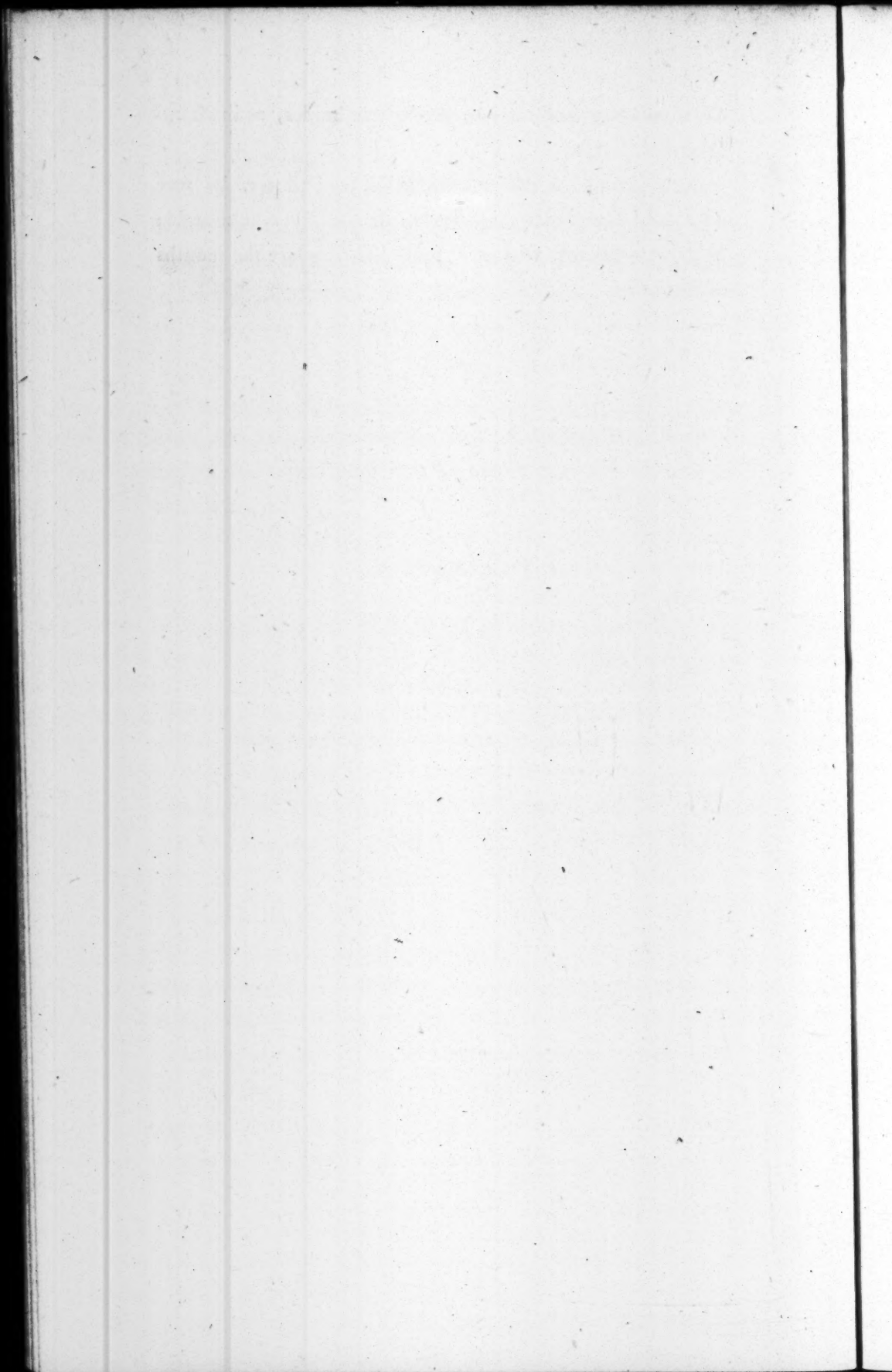
Linneus thus distinguishes his *Anthemis arvensis* from *A. Cotula*, or *Stinking Mayweed*. The root is biennial (others say perennial). The stalks are more diffused; the peduncles longer, with only four or five streaks or fine grooves, whereas that has about eight; the leaves are more hoary, and inodorous; the inner scales of the calyx are dilated at the tip and membranaceous, but in *A. Cotula* they are not at all dilated and scarcely membranaceous; the chaffs in this are lanceolate, in that narrow like a bristle; the apex of the seeds in this is crowned with a four-cornered rim, as in *Matricaria Chamomilla*; in *A. Cotula* the seeds have no crown, and terminate only in a pore.

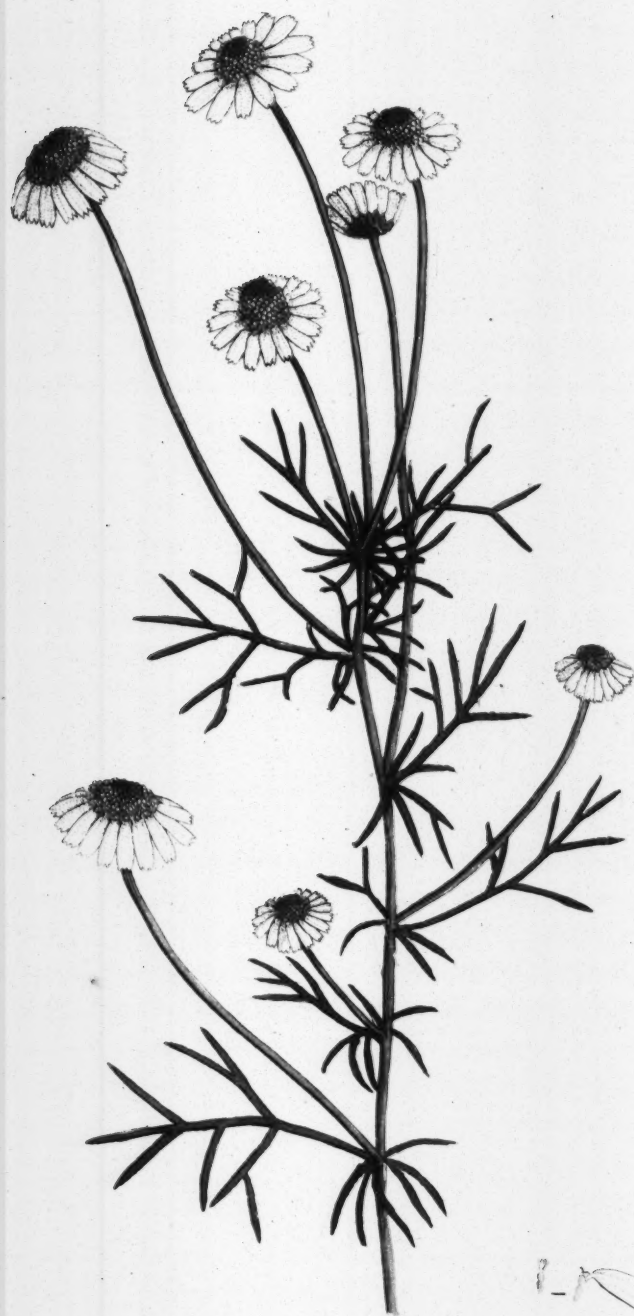
It is remarked by Dr. Stokes, that the seeds of our plant are inversely conical, slightly angular, truncate, smooth, not covered with rough points, as those of *A. Cotula*, nor the angles or top edged with a membranaceous border, as in

* Withering.

Chrysanthemum inodorum, or an opaque border, as in *A. austriaca* of Jacquin.

This plant is found in corn fields, or fallows, by way sides, and sometimes in pastures: frequently whole arable fields are whitened with it. June and July are the months of flowering.





MATRICARIA.

SYNGENESIA *Polygamia Superflua.*

GENERIC CHARACTER.

Calyx hemispherical, scales imbricate, the marginal ones solid, sharpish. *Down* to the seed none. *Receptacle* naked.

SPECIES.

Matricaria Chamomilla. *Corn Feverfew.*

Lin. spec. 1256. *Huds. angl.* 372. *Wither. arr.* 933.
Curtis lond. 5. 63. *Hall. helv. n.* 101. *Scop. carn. n.* 1042. *Pollich pal. n.* 815. *Krock. files. n.* 1432. *Villars dauph.* 3. 198.

Chamæmelum. *Ger. emac.* 754. 1. *Raii syn.* 184.
vulgare. *Bauh. pin.* 135. *Park. theat.* 85. 1.
amarum. *Bauh. hist.* 3. 116. *Raii hist.* 355.
Mor. hist. f. 6. *t.* 12. *f.* 7. *Petiv. brit. t.* 19. *f.* 9.

SPECIFIC CHARACTER.

Stem upright, ray of the flower spreading, scales of the calyx equal at the edge; receptacle conical.

DESCRIPTION.

ROOT annual. Stem green, striated, branched. Lower leaves doubly pinnate, pinnae distant, pinnules bifid or trifid; upper ones often simply pinnate, pinnae linear, and of an equal breadth with the midrib. Flowering heads single, on

long peduncles, terminating the stem and branches. Scales of the calyx bluntly lanceolate, with a green dorsal line, hairy, with membranaceous edges. Florets of the ray white, almost linear, at first spreading, afterwards reflex. Receptacle conical *. Seeds numerous, minute, pale brown, furrowed, the furrows deeper and more numerous on the inner side, the ridges white †.

OBSERVATIONS.

It is common on cultivated grounds, on dunghills, and by way sides; flowering from May to August, and even October. Several different plants are confounded with this, under the common name of *Mayweed* and *Maithes*. It differs from *Anthemis Cotula*, or Stinking Mayweed, which it most resembles in its smell, in having a higher and larger stalk, the leaves darker green and cut into finer segments ‡. The heads of flowers bruised, smell somewhat like the true Chamomile, only not so pleasant; but those of Stinking Mayweed are intolerably disagreeable, and the plant will blister the skin on being much handled. The petals of the ray in the *Matricaria* are in general longer and much narrower; the disk is more prominent and of a darker yellow than in the *Anthemis*. The seeds of the *Anthemis* are broad and truncated at top, wrinkled, and of a deep brown colour; those of the *Matricaria* are much smaller, paler, and different in shape §.

According to the Swedish observations, kine, goats, and sheep eat this plant, horses are not fond of it, and swine refuse it. It seems to be rejected in general by all quadrupeds with us. It is supposed to possess the same qualities with the officinal Chamomile (*Anthemis nobilis*), but in an inferior degree.

* Woodw. MS. † Stokes in With. ‡ Ray. § Curtis.



SCANDIX.

GENERIC CHARACTER.

Corol rayed. *Petals* subulate. *Fruit* emarginate.
Floscules of the disc often male.

SPECIES.

Scandix Anthriscus. *Rough Cicely*, or *Chervil*.

Lin. spec. 368. *Huds. angl.* 124. *Wither. arr.* 305.
Curtis lond. 1. 19. *Relb. cant. n.* 234. *Hall.*
helv. n. 743. *Pollich pal. n.* 297. *Leers ber-*
born. n. 211. *Scop. carn. n.* 312. *Jacqu. austr.*
2. t. 154. *Fl. dan. t.* 863. *Krock. files. n.* 448.
t. 41. *Petiv. brit. t.* 27. *f.* 12. *Mor. hist. f.* 9.
t. 10. *f.* 2. *row* 1. *Baub. hist. 3.* 2. 182. 1.
Raii hist. 469. 9. *syn.* 220. 7.

SPECIFIC CHARACTER.

Seeds ovate hispid, corollas uniform, stem smooth.

DESCRIPTION.

ROOT annual. Stem commonly a foot or 18 inches in height, but sometimes much higher in moist situations, upright, branching, cylindric, smooth, swelled and slightly striated at the joints, generally of a green colour. Leaves tri-pinnate, soft and tender, slightly hairy, especially underneath and along the midrib, of a yellowish green colour: pinnae opposite, four on each side; leaflets cloven, sharp.—Petioles channelled, villose, embracing the stem at the base

with a large sheath: on the stem the petioles are very short. Peduncles axillary, opposite to the leaves. The general umbel has commonly three rays, sometimes 4 or 5; the partial umbel has from 3 to 5 rays. General involucre usually wanting, though sometimes there is a single leaflet; partial involucre consists of 4 or 5 lanceolate, pointed, ciliate, permanent leaflets. All the corollas are fertile; petals heart-shaped and bent in, nearly equal. Seeds ovate, dark brown, with stiff hairs hooked upwards on the convex side*.

OBSERVATIONS.

This plant is very distinct from another of the same genus †, as will easily appear by comparing the figure and description here given with those at n. 38. In habit it approaches nearer to Chervil ‡, from which however it may readily be distinguished by the want of that pleasant smell which Chervil possesses when rubbed, but especially by the seeds, which in Chervil are black, smooth and glossy, longer and narrower, with two blunt ridges. No one can mistake these two plants who has once compared Jacquin's elegant figures of them in t. 154. and 390. of *Flora Austriaca*. Mr. Curtis's figure of this is excellent. It can scarcely be confounded with the true Hemlock §, that being a much larger plant; with a spotted stalk, the leaves perfectly smooth, not so finely divided, and of a darker green; having a general involucre, and smooth seeds: the strong hircine smell also betrays the Hemlock.

This rough Chervil, or Hemlock Chervil, as our older writers call it, is common by way sides, on banks, in hedges, and under walls: flowering in May and June.

Mr. Miller relates, that there have been some instances of the ill effects of this plant when taken inwardly; some who have eaten this herb in soups, by mistaking it for Garden Chervil, having narrowly escaped with their lives. He does not say whether he speaks from his own experience, and he does not cite any authority. We have not observed his account to be confirmed by other writers.

* Lyons in Relh. Curtis lond. † Scandix Pecten.

‡ Scandix Cerefolium. § Conium inaculatum.

MEDICAGO.

DIADELPHIA Decandria.

GENERIC CHARACTER.

Legume compressed, screw-shaped. *Keel* of the corolla bending down from the banner.

SPECIES.

Medicago polymorpha. *Variable Medick.*

VARIETY.

Med. polym. arabica. *Heart Medick.*

Lin. spec. 1098. 9. 7. *mant.* 454. *Huds. angl.* 331.

Wither. arr. 808. *Curtis lond. fasc.* 3. *Camer.*

bort. t. 27. *Ger.* 1021. 4. *emac.* 1190. 4. *Park.*

1115. 6. *Mor. hist. f.* 2. *t.* 15. *row.* 2. *f.* 12.

17. *Hall. belv. n.* 383. *Scop. carn. n.* 942. *Raii*

hist. 963. 12. *syn.* 333. 1.

SPECIFIC CHARACTER.

Legumes spiral or screw-shaped, *stipules* toothed, *stem* diffused or spreading.

CHARACTER of the VARIETY.

Peduncles mostly three-flowered, *legumes* echinate, *leaflets* obcordate or inversely heart-shaped.

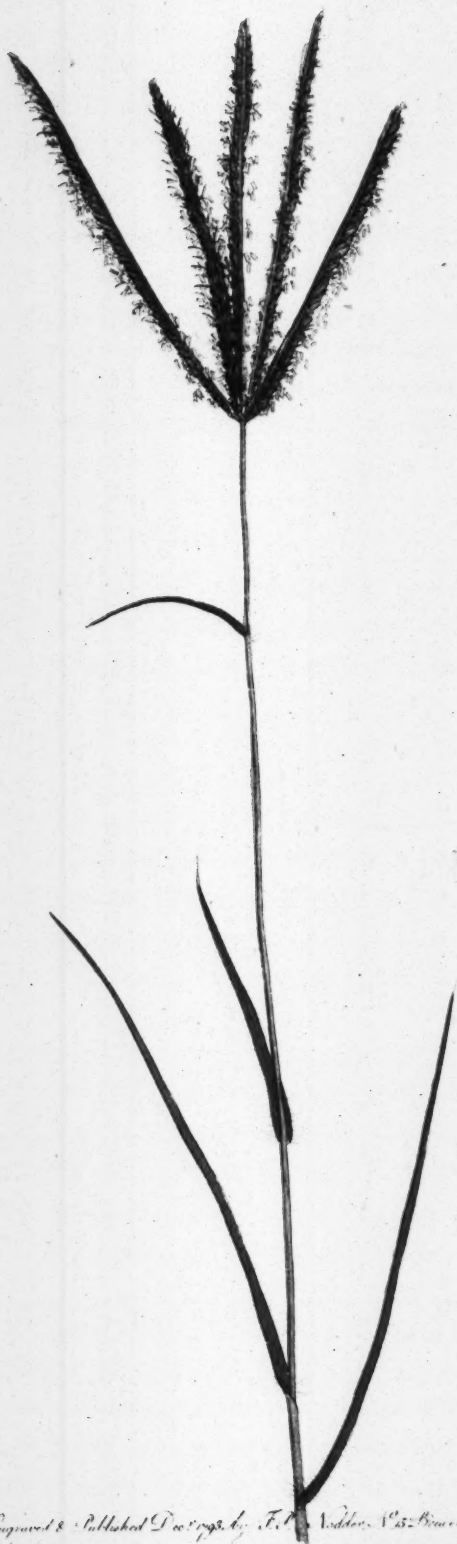
DESCRIPTION.

ROOT annual. Stems numerous, a foot in length, more or less according to the soil, procumbent, hairy, branched. Leaves obscurely ferrate, smooth, with a spot in the middle. Stipules in pairs, semi-sagittate, ferrate. Flowers yellow, from 2 to 4 or 5 together, on round hairy peduncles shorter than the petioles; there is a very small bracte at the base of each peduncle, and a bristle between the flowers of the same length with them *.

OBSERVATIONS.

This Medick is called by Gerard Heart Trefoil; others call it Heart Claver or Clover, which has been corrupted into Heart Liver. But though it agrees with the Trefoils or Clovers in its ternate leaves, yet since it is so materially distinct by its spiral legumes, the name of Heart Medick is to be preferred. It is very common on banks and the borders of fields, in dry sandy pastures, and especially near the sea; flowering in May and June. It varies much in size, as well as in the shape and brightness of the spots on the leaves, which, according to the observation of Linneus, disappear in the flowering plant. We have frequently observed it very luxuriant, when in a state of accidental cultivation, among lucerne, faintfoin or trefoil, but its hairiness and the extreme roughness of the seeds seem to make it not so desirable a fodder for cattle as the Hop-Medick, or Hop-Trefoil; at least it should be cut or pastured when young.

* Curtis.

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PANICUM.

TRIANDRIA Digynia.

GENERIC CHARACTER.

Calyx three-valved, third valve least.

SPECIES.

Panicum dactylon. *Creeping Panic-grass.*

Lin. spec. 85. *Huds. angl.* 25. *Wither. arr.* 58.
Hall. belv. n. 1527. *Scop. carn. n.* 73. *Pollich*
palat. n. 61. *Krock. files. n.* 96. *Mor. hist. f.* 8.
t. 3. *row.* 2. *f.* 4, 6. *Ger. emac.* 28. 3. *Park.*
theat. 1179. 5. *Raii syn.* 399. 1.

SPECIFIC CHARACTER.

Spikes fingered, spreading, villose at the base on
the inside; flowers solitary; runners creeping.

DESCRIPTION.

ROOT perennial, creeping by runners. Culms from 8
or 9 inches to a foot high, smooth, glaucous, frequently pur-
ple at the joints. Leaves somewhat glaucous, from 1 to 4
inches in length, and 1 or 2 lines in breadth, acuminate,
roughish, hairy on both sides, especially towards the base.—
Sheaths smooth, ending in a very short, hairy membrane or



ligule. Spikes 4, 5 or 6, linear, three-sided, an inch or an inch and half in length, purple when young, at first upright, but gradually spreading till they become horizontal. Spikelets solitary, sessile in each toothlet of the rachis, upright, ovate, acuminate, compressed, about a line in length, purple and smooth, the distance of about half a line from each other. Glumes of the calyx commonly two only, lanceolate, finely tapering, spreading, nearly as long as the corolla.— Inner valve of the corolla ovate, keeled, only half the breadth of the outer, with an awn-like thread from its base, apparently the rudiment of a pedicel, analogous to those in *Melica*, &c*. Anthers purple. Styles and stigmas violet coloured.

OBSERVATIONS.

Native of many parts of Europe, chiefly in sandy ground, in pastures and cultivated fields, by way sides, in waste places, on walls, and in marshes and boggy places. In England it has been remarked by Ray, in Cornwall between Penzance and Market-jeu. It flowers in July and August.

The roots are said to be used in Italy for the same purposes with *Triticum repens*.

* Stokes in *Withering*.



Canis, C. ... & Published Dec. 798 by J. C. ...

SPECIES.

Panicum sanguinale. *Slender-spiked Cock's-foot*
Panic grass.

Lin. spec. 84. *Hudf. angl.* 25. *Wither. arr.* 57.
Curt. lond. fasc. 4. *Hall. helv. n.* 1526. *Scop.*
carn. n. 72. *Pollich palat. n.* 60. *Krock. files. n.*
 95. *Schreb. gram.* 119. *t.* 16. *Mor. hist. f.* 8.
t. 3. *row.* 1. *f.* 2. *Fl. dan. t.* 388. *Ger.* 25. 2.
emac. 27. 2. *Park. theat.* 1178. 1. *Raii syn.*
 399. 2.

SPECIFIC CHARACTER.

Spikes fingered, knotty on the inside of the base;
 flowers in pairs, awnless; sheaths of the
 leaves dotted.

DESCRIPTION.

ROOT annual. Culms about the same height with the foregoing, reddish, sometimes branched, bending upwards, very slender and weak, generally having four joints. Leaves from an inch to two inches in length, and two or two lines and a half in breadth, sharp, often waved on one of the edges, very finely serrate on both, having a few hairs on each surface. Sheaths very hairy, the hairs proceeding from little prominent points. Spikes (3-5) sessile on the top of the culm,

from an inch and half to four inches in length, dark purple, or purple and green. Spikelets pointing one way, pressed to the rachis, pedicelled, ovate-lanceolate, sharp, purple or green. Glumes or valves of the calyx three, permanent, the lowest so minute as to be scarcely perceptible to the naked eye; the others opposite, unequal, acute, nerved, rough on the edges, the upper one the length of the corolla, which it enfolds with its margin, the lower one only half the length of the other. The two valves of the corolla equal and smooth. Anthers and stigmas purple *.

OBSERVATIONS.

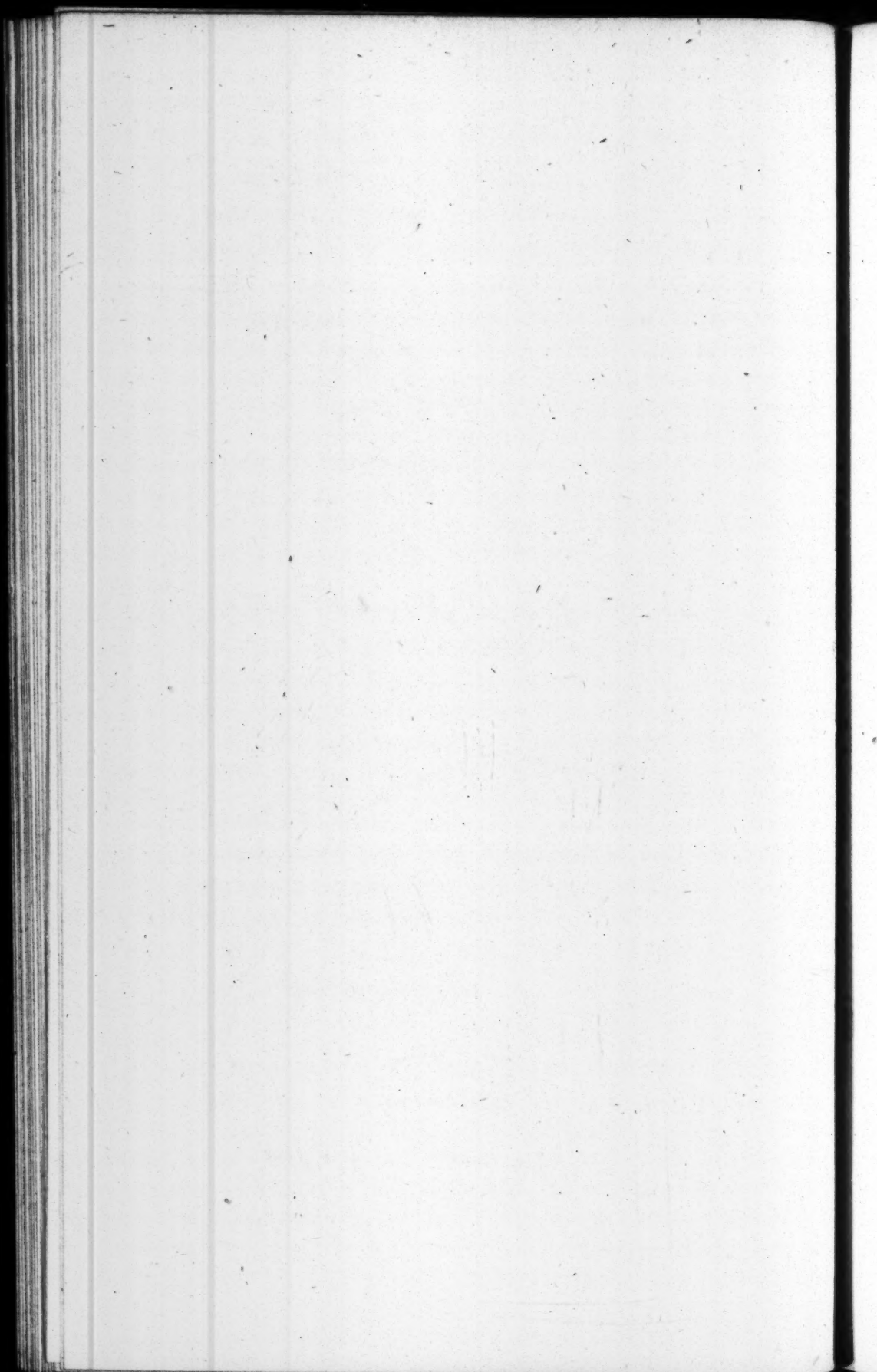
Native of Europe, Asia, and America, but with us not common. It has been remarked about Elden in Suffolk, Witchingham in Norfolk, Guildford and Battersea in Surry; flowering from July to September.

Haller, Scopoli, and others, from the peculiar disposition of the spikes, have made these Grasses a distinct genus under the name of *Digitaria*.

It derives the trivial name *sanguinale* from a trick which the boys in Germany have, of pricking the nostrils with the spikelets, till they draw blood.

It is said to have been cultivated formerly for the seeds, but that those of *festuca fluitans* superseded it. A sandy soil is congenial to it, and its spreading culms help to keep such a soil moist, and to prevent its being carried off by the winds.

* Curtis.





AVENA.

TRIANDRIA Digynia.

GENERIC CHARACTER.

Calyx two-valved, many-flowered, with a twisted awn at the back.

SPECIES.

Avena fativa. Cultivated Oat.

Lin. spec. 118. *Hall. helv. n.* 1494. *Villars dauph.*

2. 147. *Krock. files. n.* 178. *Mill. illustr.*

Blackw. t. 422.

A. disperma. *Mill. dict.*

Var. A. alba. White Oat.

Bauh. pin. 23. *Bauh. hist.* 2. 432. *Raii hist.* 1253. 1.

SPECIFIC CHARACTER.

Panicled, calyxes two-seeded, seeds smooth, one of them awned.

OBSERVATIONS.

THE Oat is so generally known and cultivated as a species of grain or corn, that it is unnecessary to describe it. There are several varieties; as the White Oat, here figured, which is most common in the Southern counties; the black,

more cultivated in the Northern parts of England; the red or brown, much cultivated in Derbyshire, Staffordshire, and Cheshire; Poland, Tartarian Oats, &c.

The principal use of this grain, in Southern countries, is as a food for horses. In the North it is a common substitute for wheat in bread. A sort of beer is made from it; and it is much used for gruel and other messes.

It is remarkable, that we are not able to ascertain the native place of growth, either of this or the other species of grain. Hence some have supposed that they are mere creatures of art, wild grasses improved by culture; whilst others have fancied, very unphilosophically, that such grasses as bear a resemblance to several sorts of corn, are the same species in a state of nature, or relapsed into their former state of degeneracy. Let it suffice to have mentioned such unfounded fancies.



Illustration engraved & published for J. & P. Neill, N. 5. Brown Street, Golden Square.

SPECIES.

Avena nuda. Naked Oat.

Lin. spec. 118. *Huds. angl.* 52. *With. arr.* 113.

Mor. hist. f. 8. *t.* 7. *f.* 4. *Ger. herb.* 68. 2.

emac. 75. 2. *Park. theat.* 1134. 2. *Baub. hist.*

2. 433. *Raii syn.* 389. 6. *hist.* 1254.

SPECIFIC CHARACTER.

Panicled, calyxes three-flowered, receptacle longer than the calyx, petals awned at the back, except the third flower, which is awnless.

DESCRIPTION.

THIS bears a great resemblance to the common White Oat, but is easily distinguished from it, by the seeds, when ripe, falling out of the husks. Haller observes, that there are sometimes only two flowers in a calyx, and that the awn is neither twisted nor jointed. Ray says, that it has not a hard husk, like the common Oat, but several thin chaffy coats; the grain also is smaller, but fuller bodied, and inclining to tawny, like the red oat.

OBSERVATIONS.

The naked oat is called also *Pillis* or *Pill-corn*, from its quality of depositing the husk or chaff. *Pill*, which we now write *Peel*, being formerly put for the outer coat of any sort of fruit. Mr. Ray informs us, that in his time it was cul-

tivated abundantly in the farther part of Cornwall, where it fetched no less a price than wheat. Dr. Plot also mentions its being cultivated in Staffordshire.. According to Mr. Miller, in the North of England, in Scotland, and in Wales, it is cultivated in plenty; being esteemed because the grain threshes clean out of the husk, and need not be carried to the mill to be made into oatmeal or grist. The produce of this is not so great as that of the common Oat, because the grain being small and naked, goes near in measure; but what is wanting in measure is supplied in value*.

* What Mr. Miller says is copied from Worlidge.



SPECIES.

Avena fatua. Wild or bearded Oat.

Lin. spec. 118. *Huds. angl.* 52. *Witber. arr.* 113.

Hall. belv. n. 1495. *Pollich palat. n.* 123. *Leers*

berborn. n. 90. *t.* 9. *f.* 4. *Villars dauph.* 2. 147.

Krock. files. n. 182. *Mill. illustr. Mor. hist. f.* 8.

t. 7. *f.* 5. *Raii hist.* 1254. 4.

SPECIFIC CHARACTER.

Panicked, calyxes three-flowered, all the florets awned and hairy at the base.

DESCRIPTION.

OUR Wild Oat has an annual root. It is a taller plant than the cultivated oat, the culms or straw being frequently three or four feet in height. The leaves are smooth, except about the edge, where they have a few hairs, so that they are rough to the touch when stroked downwards. Panicle pyramidal, with spreading branches, some of them dividing towards the top, from 1 to 6 at a knot. Peduncles hairy. Valves of the calyx from 9 to 11 lines long and ribbed, the outer valve generally a line shorter than the other, containing two florets, both awned; the third is often wanting. The corolla has tufts of hair at the base; outer valve even, the ribs not being prominent, beset with whitish hairs about the insertion of the awn, and some few scattered ones between

it and the base, slightly cloven at the end, but readily separable to the depth of two lines, fawn-coloured when ripe. The awn is twice as long as the corolla, and rough; it is bent aside about a line above the point of the valve*.

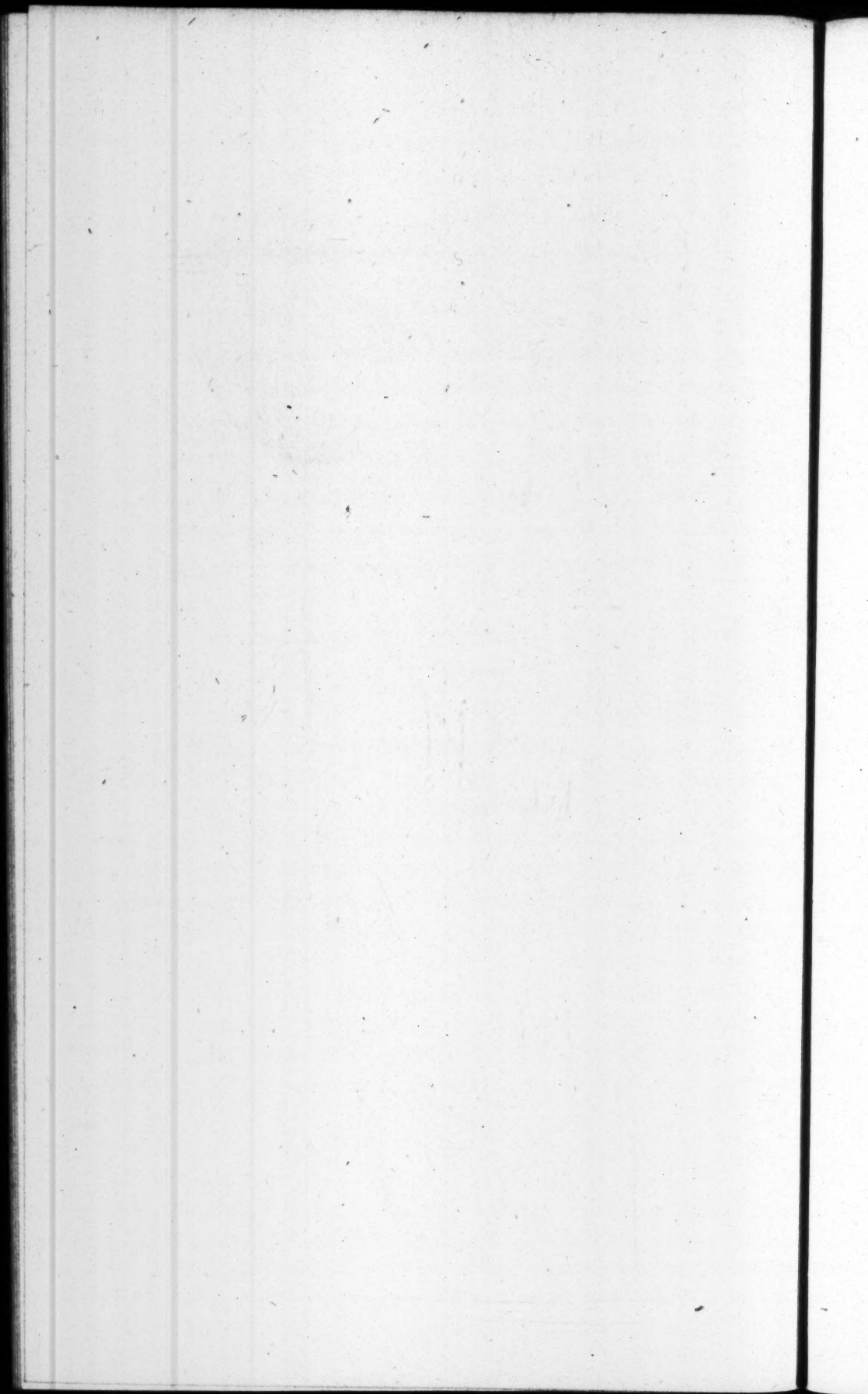
OBSERVATIONS.

It is called by our English writers *Bearded Wild Oats* or *Haver*. It is one of our most destructive annual weeds among corn, and is frequently so prevalent among barley, as almost to choke it. The wild oat ripens its seed and falls before the crop itself is ripe, thus filling the ground, where it will lie several years without vegetating. It may be extirpated by repeated fallowing, or by laying down the land to grafs.

The awns are used for hygrometers, and the seeds instead of artificial flies, in fishing for trout.

The *sterilis avena* of Virgil, or the wild Oat of Southern countries, is a different species from this.

* Stokes, &c. in Withering.





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DAUCUS.

PENTANDRIA Digynia.

GENERIC CHARACTER.

Corollas sub-radiate, all hermaphrodite. *Fruit*
rough with hairs.

SPECIES.

Daucus Carota. *Wild Carrot, or Bird's-nest.*

Lin. spec. 348. *Wither. arr.* 274. *Lightf. scot.* 156.

Relb. cant. n. 216. *Hall. helv. n.* 746. *Pollich.*

pal. n. 273. *Scop. carn. n.* 307. *Krock. files.*

n. 406. *Villars dauph. 2.* 652.—Figured in

Fl. dan. t. 723. *Rivin. pent. t.* 28. (*Staphyli-*

nus) *Ger.* 873. *emac.* 1028. *Park. theat.* 902.

2. Mor. hist. f. 9. *t.* 13. *f.* 2. *Camer. epit.* 508.

Fuchf. 684. *Baub. hist. 3.* 62. (*Pastinaca*).

Caucalis Carota. *Huds. angl.* 114.

D. vulgaris. *Raii syn.* 218.

SPECIFIC CHARACTER.

Seeds hispid, petioles nerved underneath

OBSERVATIONS.

ROOT fusiform, straight, seldom branched, smaller,
paler, more hard and sticky than in the cultivated Carrot,

but having a more aromatic scent. Stems grooved, rough with hairs. Leaves sheathed, hairy, very rough along the nerves, pinnate-pinnatifid, the extreme pinnules toothed, ending in little spines. Involucres many-leaved, the universal pinnatifid, the partial linear-lanceolate. The umbel is composed of 30 or 40 unequal rays; the umbellule of fewer, (about 30) and more equal. Flowers white, in the middle sometimes purple or deep crimson; those in the circumference are frequently defective or quite barren.

OBSERVATIONS.

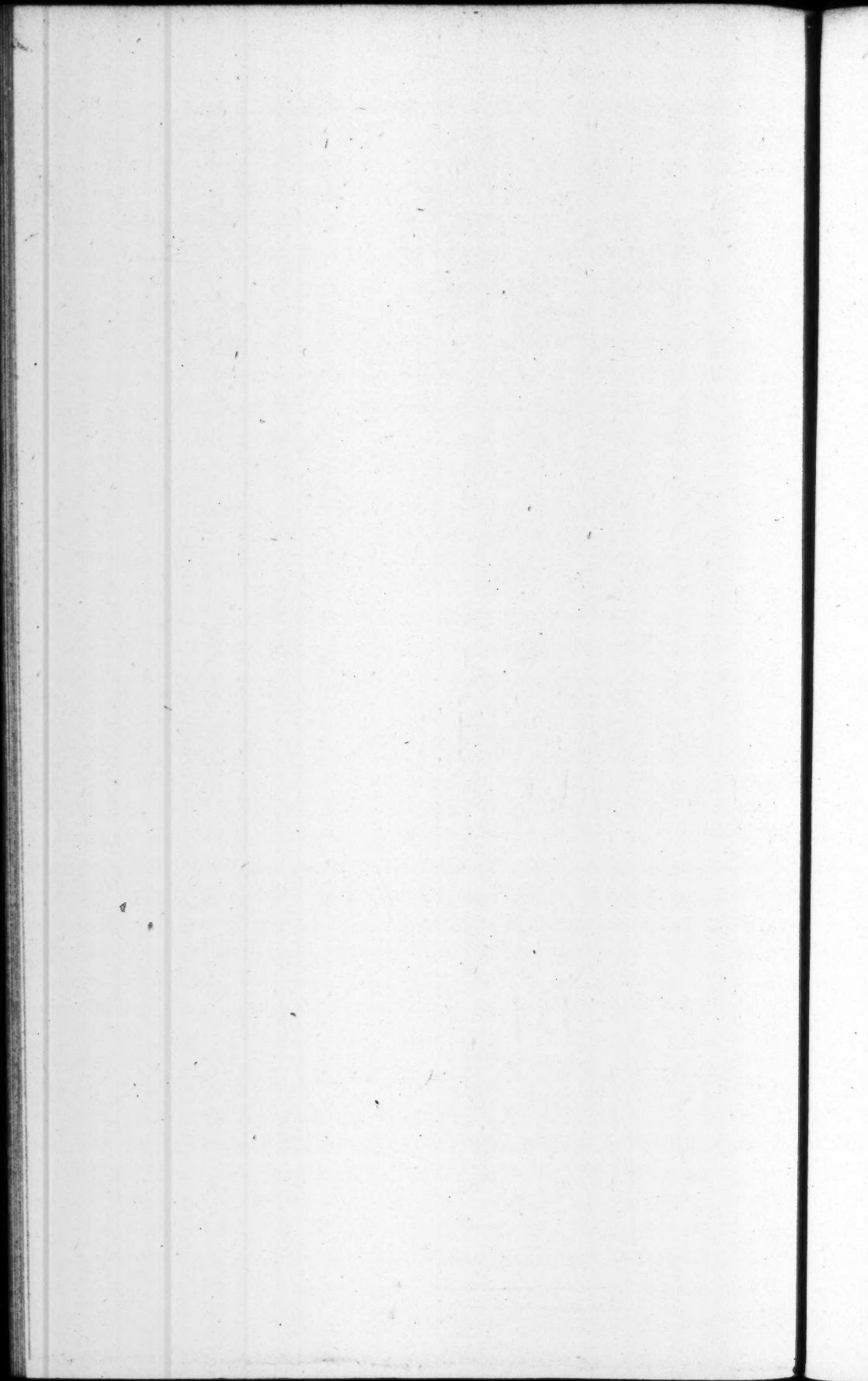
Wild Carrot is common in pastures, on balks and headlands. It is a biennial plant, flowering from June to August. The umbel is at first a little convex, but becomes gradually flat, and then more and more concave, till it forms a perfect basin, in its feeding state resembling a bird's-nest. It is then easily distinguished, and has derived the common English name from this circumstance. Others, it is said, call it *Bee's-nest*, and that name is recorded by Gerard.

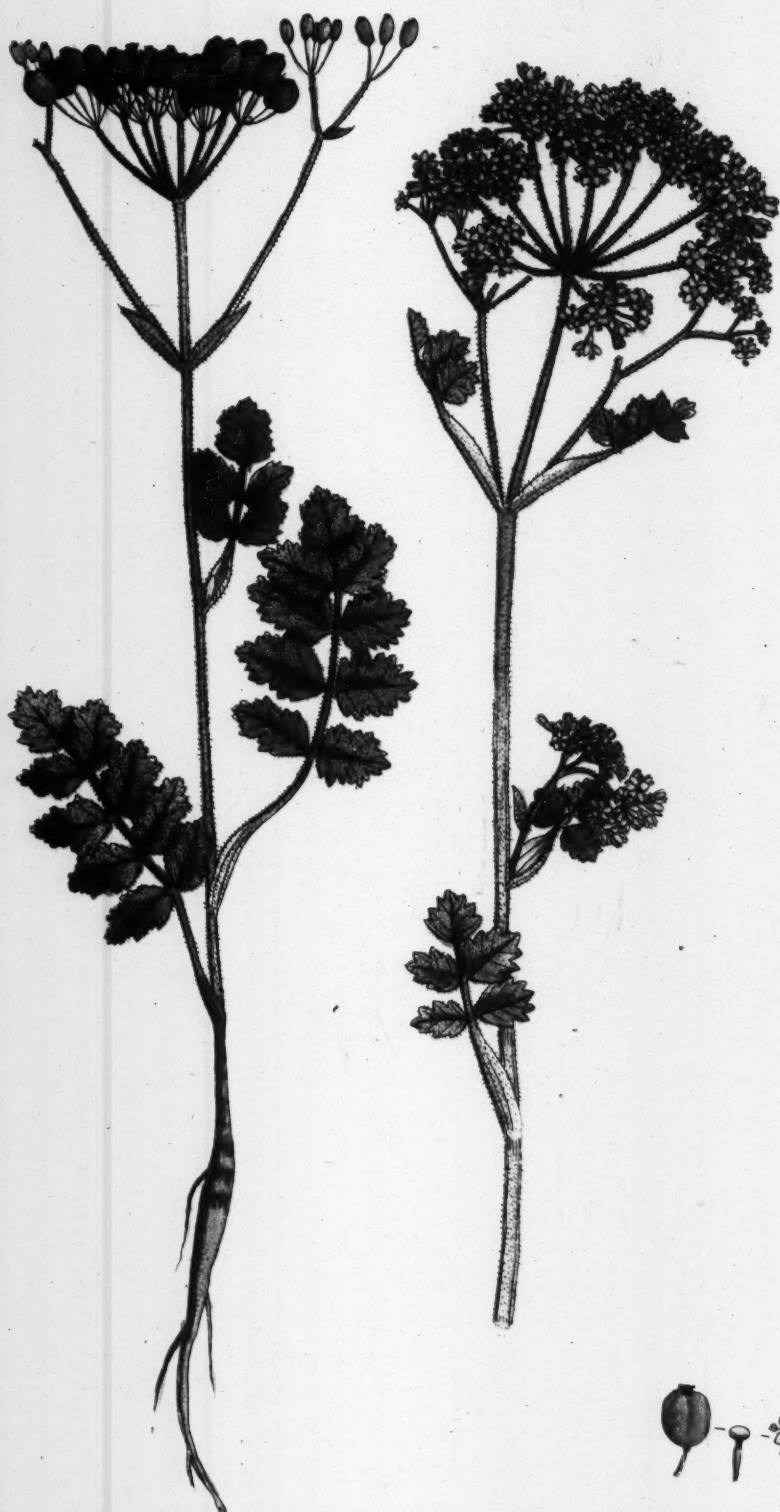
The seeds have been used as diuretics and carminatives, and are highly recommended in fits of the gravel and stone.

Moles are so fond of the roots, that they are a proper bait to take these animals; but garden carrots answer best for this purpose, as well as for destroying crickets, being made into a paste with powdered arsenic and wheat meal; and for poultices to mitigate the pain, and abate the stench, of foul and cancerous ulcers.

Mr. Miller informs us, that he could never improve the wild carrot, so as in any degree to render the roots eatable, like that which is cultivated. In this and the like cases he concludes, that the plants are specifically different; but this is a reasoning not to be admitted. He adds, that the shops

are supplied with old seeds of the garden carrot, instead of fresh ones of the wild sort, to be used medicinally. This is one of the many ways by which efficacious medicines are brought into disrepute; but if wild carrot seeds be really valuable in calculous cases, they may easily be gathered fresh in abundance by every husbandman.





Drawn Engraved & Published Feb. 7 1794 by T. R. Voddler, N^o. 15. Broad Street, Golden Square.

PASTINACA.

PENTANDRIA Digynia.

GENERIC CHARACTER.

Fruit elliptic, compressed flat. Petals rolled in, entire.

SPECIES.

Pastinaca fativa. Parsnep.

Lin. spec. 376. *Witber. arr.* 309. *Hall. helv. n.*

808. *Scop. carn. n.* 233. *Pollich. pal. n.* 303.

Krock. files. n. 464. *Villars dauph. 2.* 637.

P. sylvestris. *Hudf. angl.* 125. *Relb. cant. n.* 237.

Mill. dict. n. 1. *Raii syn.* 206. *hist.* 409.

Figured in *Riv. pent. t.* 6. *Ger.* 856. *emac.* 1025.

2. *Mor. hist. f.* 9. *t.* 16. *f.* 2. *Baub. hist.* 3.

149. *Fuchf.* 753.—Cultivated.—*Fuchf.* 751.

Ger. 870. 1. 2. *emac.* 1025. *Park. theat.* 944.

Baub. hist. 3. 150. *Mor. f.* 1.

SPECIFIC CHARACTER.

Leaves simply pinnate.

DESCRIPTION.

WILD Parsnep has upright, stiff, pubescent, hollow stems, deeply grooved so as to be angular, and branching;

they are from a foot and a half to upwards of four feet in height. The leaves are large; the leaflets very soft, with a pile of hairs, ferrate, and often three-lobed, especially the end one: petioles sheathed, grooved, pubescent. Umbels broad, composed of 10, 12, or sometimes more unequal rays: umbellule has more rays, 16, 20, and upwards. Corolla yellow, regular. Seeds smooth, grooved, brown.

OBSERVATIONS.

Wild Parsnep is found in pastures, hedges, and the borders of ploughed fields, particularly in a calcareous soil; flowering in July and August.

Mr. Miller makes the same observations respecting the wild and garden Parsnep, as he does on the Carrot.

The roots cultivated abound much more in saccharine juice than those of Carrot; and in the North of Ireland are brewed instead of malt, with hops, and fermented with yeast; the liquor, thus obtained, is said to be pleasant. Being highly nutritious, they are much used by those who abstain from animal food in Lent. The seeds will often cure intermittent fevers*.

Swine are fond of this root, and quickly grow fat with it. Both this and Carrot deserve the attention of the husbandman, where the ground is fit for them, for feeding horses, and fattening hogs and cattle.

* Withering.





FESTUCA.

TRIANDRIA Digynia.

GENERIC CHARACTER.

Calyx two-valved. *Spikelet* oblong, roundish, with acuminate glumes.

SPECIES.

Festuca pratensis. *Meadow Fescue*.

Huds. angl. ed. 1. 37. *With. arr.* 101. *Curtis lond.* n. 66. *Præst. obs.* 16. t. 5.

F. fluitans pratensis. *Huds. angl. ed.* 2. 47. γ.

Poa. Hall. belv. n. 1451.

Gramen paniculatum elatius, &c. *Raii syn.* 411. 16. *Scheuch.* 202. 2.

Figured in *Mus. rust.* 4. 2. *Mor. hist. f.* 8. t. 2. f. 2. δ. *Scheuch.* 4. 6. *Park. theat.* 1146. 8. (Phoenix.)

SPECIFIC CHARACTER.

Panicle directed one way oblique, spikelets without awns, almost linear, leaves flat.

DESCRIPTION.

ROOT perennial. Culms two feet high. Leaves two lines or more in breadth, rough to the touch. Panicles

large, loose. Spikelets six or eight-flowered, acuminate, smooth.

As this sort of grass approaches so near to *Festuca elatior*, as to have been confounded with it, to point out the distinctive marks may be more to the purpose, than to give a long description.

This has only half the height of the *elatior*, or little more; the leaves have only half the breadth; the panicle is shorter, and contains about half the number of flowers; the panicle is but once branched, droops but slightly, leans to one side when in flower, and the flowers all grow one way; in the *elatior* the panicle branches twice, it droops greatly at first, and the flowers grow much more loosely; in this also the spikelets are somewhat flat, linear, and obtuse; in that they are more round, ovate, and pointed*.

OBSERVATIONS.

The common place of growth of Meadow-Fescue grass is the meadow; but it is found in a variety of soils and situations, from the sand-pit to the osier-holt. In culture it seems most adapted to middle land, either moderately moist or dry. It is not quite so early as Foxtail and the Meadow-grasses, but it flowers about the middle of June, and has been cut for seed by Mr. Curtis, who has paid great attention to this excellent grass, by the end of the same month. He recommends it as greatly superior to Ray-grass, and as most likely to remedy the deficiencies complained of in that. It is very hardy, sufficiently large and productive of foliage, produces abundance of seeds, easily gathered, and growing readily, and is by no means a late grass. Being now under trial in skilful hands, we shall soon be acquainted with its real merits.

* Curtis.



Eng. and Published. March 1894 by E. C. Nodder, N.Y., Bowser Street, Golden Square.

SENECIO.

SYNGENESIA *Polygamia Superflua.*

GENERIC CHARACTER.

Cal. cylindric, calyced; scales mortified at the tip. *Down* simple. *Recept.* naked.

SPECIES.

Senecio Jacobæa. *Common Ragwort.*

Lin. spec. 1219. *Huds. angl.* 365. *Lightf. scot.* 480.
Wither. arr. Hall. belv. n. 62. *Scop. carn.*
n. 1072. *Pollich. pal. n.* 797. *Krock. files. n.*
1396. Villars dauph. 3. 226. *Fl. dan. t.* 944.
Mor. hist. f. 7. t. 18. f. 1. Ger. herb. 218. 1.
emac. 280. 1. *Park. theat.* 668. 1. *Raii hist.*
284. syn. 177.

SPECIFIC CHARACTER.

Corollas rayed, leaves pinnate-lyrate, with the jags subdivided into other smaller jags, stem upright.

DESCRIPTION.

ROOT creeping, truncated, fibrous. Stems two, three, or four feet high, streaked, upright, branched. Leaves generally green, without any down or hoariness; those next

the root pinnatifid at the base only, with a large oval sinuated segment at the extremity; on the stem they are pinnatifid throughout, and their segments laciniated; these are more numerous and finer in proportion to the dryness of the soil. The flowers grow in umbels, and are yellow: peduncles generally downy; calyx smooth, with the scales blackish at the tips; ray spreading, with about 12 flowers; in the disk about 60.

OBSERVATIONS.

Ragwort, called in some parts of the north Seggrum, is a common weed in grass grounds. Where these are mowed, it is easily kept down, since, if it be not biennial, it is not a very lasting plant; but in pastures, it eludes the bite of cattle, and becomes a very large rank weed, occupying much room, and propagating itself abundantly by its downy seeds. Mowing does not destroy it; but it may quickly be pulled up by hand, only observing to perform the operation in moist weather, for if any considerable fibres be left in the ground, the roots will strike again.

It might very probably be of service in dyeing.

f-f--o

MEDICAGO.

DIADELPHIA Decandria.

GENERIC CHARACTER.

Banner and wings almost equal, spreading out in form of a three-petalled corolla.

SPECIES.

Medicago falcata. *Yellow Medick.*

Lin. spec. 1096. *Huds. angl.* 330. *Relb. cant. n.* 549.

Wither. arr. Hall. belv. n. 381. *Scop. carn. n.*

941. *Pollich. pal. n.* 713. *Krock. files. n.* 1222.

Villars dauph. 3. 400. *Fl. dan. t.* 233. *Rivin.*

tetr. t. 84. (*Falcata*).

Medica falcata. *Mill. dict. n.* 2. *Mor. hist. f. 2. t.*

16. *f.* 1.

M. sylvestris. *Baub. hist. 2.* 383. *Raii syn.* 333.

M. frutescens, flavo flore. *Clus. hist. 2.* 243. *Park.*

theat. 1114. 3. *Raii hist.* 960. 2.

Trifolium luteum, &c. *Baub. pin.* 330. 2. *Ger.*

emac. 1191. 8.

SPECIFIC CHARACTER.

Peduncles in racemes, legumes shaped like a crescent, stems prostrate.

DESCRIPTION.

ROOT perennial. Stems procumbent, ascending or bending upwards towards the end, branching, two, three, and sometimes four feet in length. Leaves alternate, petioled; leaflets lanceolate or oblong ovate, truncate or retuse, toothed at the end, the nerve ending in a little spine; the two lateral ones are almost sessile, but the odd one is on a longer petiole. Stipules lanceolate, acuminate, entire. Peduncles axillary, somewhat angular, standing much above the leaf. Flowers in a short raceme. Corolla commonly yellow. Legumes sickle-shaped, not making several turns as in cultivated Lucern, linear, 6 or 7 lines long, and scarcely two broad, slightly pubescent, black when ripe. Seeds smooth, yellow.

Mr. Miller remarks, that the stalks of this are smaller, and never rise so high, as those of the true Lucern, and that they are generally prostrate; that the leaves are not half so broad; that the flowers are produced in short roundish spikes, and are of a saffron colour.

OBSERVATIONS.

Yellow Medick is common in the south of Europe, by way sides, and in dry pastures; flowering from June through the summer. With us it is less common. Linneus recommended it for cultivation; but Haller objects to the hardness of the stalks, and its prostrate manner of growth. In cultivation however the stalks may prove more succulent, and in this state they will support each other. Upon the whole, it may probably turn out not to be superior to the purple Medick or Lucern. The roots strike very deep, and are with difficulty eradicated.

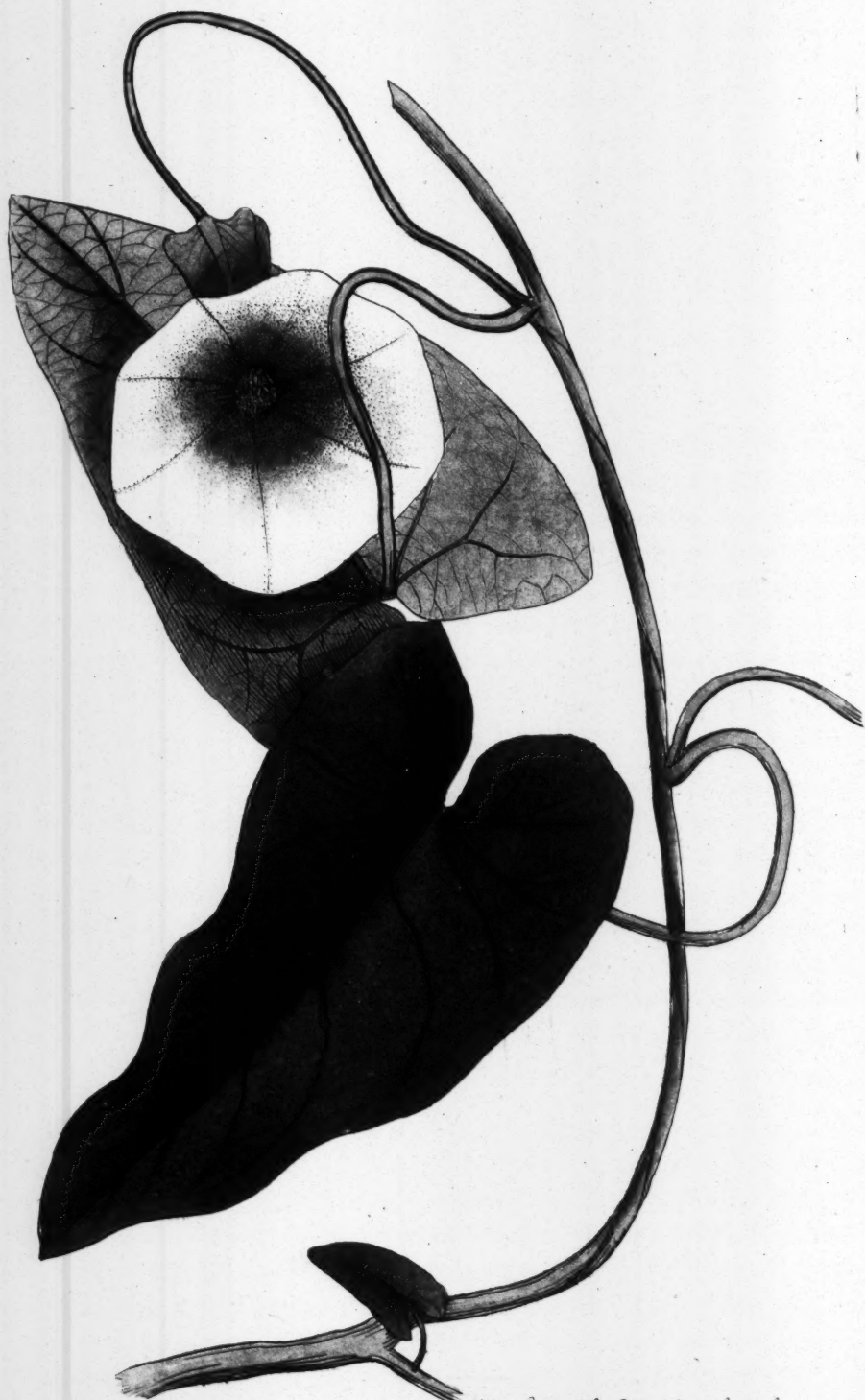


SPECIES, or rather *Variety*.

Medicago varia. Various-flowered Medick.

OBSERVATIONS.

YELLOW Medick varies much in the colour of its flowers, which are sometimes whitish, quite white, or greenish. The variety here figured is remarkable in having flowers, of colours so different as blue and yellow, on the same stalk. Caspar Bauhin says, that it is found in the south of France with whitish yellow, green, blue, purple, black, and variegated flowers; but he does not affirm that these different colours occur on the same plant. Mr. Ray observed it with a purple flower, between Norwich and Lynn, and doubted whether it was not the true Lucern in a wild state. The stipules are narrower in this than in the foregoing, but whether the difference be permanent we cannot say.



Engraved & Published April 1898, by F. P. Veldman, No. 15, Brewer Street, Golden Square.

CONVOLVULUS.

PENTANDRIA Monogynia.

GENERIC CHARACTER.

Cor. bell-shaped, plaited. *Stigmas* two. *Caps.* two-celled, with two seeds in each cell.

SPECIES.

Convolvulus sepium. Great Bindweed.

Lin. spec. 218. *Huds. angl.* 88. *Wither. arr.* 213. *Curtis lond.* 1. 13. *Relb. cant. n.* 167. *Hall. belv. n.* 663. *Scop. carn. n.* 220. *Pollich. pal. n.* 205. *Leers herborn. n.* 146. *Krock. files. n.* 308. *Fl. dan. t.* 458. *Blackw. t.* 38. *Ger.* 712. 1. *emac.* 861. 1. *Park. theat.* 163. 3. *Mor. hist. f.* 1. *t.* 3. *f.* 6. *Dod.* 392. *Lob. obs.* 340. 1. *Fuchsf.* 720. *Baub. hist.* 2. 154. *Raii hist.* 725. 6. *syn.* 275. 1.

SPECIFIC CHARACTER.

Leaves sagittate, with the hinder corners truncate or cut off, peduncles four-cornered, one-flowered, bractes or involucre heart-shaped close to the flower.

DESCRIPTION.

ROOT perennial, white, the thickness of a goose-quill, creeping. Stems many, streaked, twisted, twining about other plants and shrubs to the height of six feet; branches few, alternate. Leaves alternate, smooth, petioled. The large involucre is commonly purplish. Corolla white, very large, obscurely divided, and turned back a little.

OBSERVATIONS.

This plant is very common in hedges, and flowers late, in August and September. It increases prodigiously by its creeping roots, and is not eradicated but with great difficulty; were it not for this property, it might be considered as a very ornamental plant. The flowers sometimes vary to red.

The inspissated juice, in doses of twenty and thirty grains, is a powerful drastic purge. Dr. Withering, therefore, asks, can it be worth while to import Scammony, which is so nearly allied to this, from Aleppo, when a medicine with the very same properties grows spontaneously in our hedges? Though an acrid purgative to the human race, it is eaten by hogs in large quantities without any such effect.



SPECIES.

Convolvulus arvensis. *Small Bindweed.*

Lin. spec. 218. *Huds. angl.* 88. *Witber. arr.* 213.
Curtis lond. 2. 13. *Relb. cant. n.* 166. *Hall. belv. n.* 664. *Scop. carn. n.* 219. *Pollich. pal. n.* 204. *Leers herborn. n.* 245. *Krock. files. n.* 307. *Fl. dan. t.* 459. *Ger.* 712. 2. *emac.* 861. 2. *Park. theat.* 171. 2. *Mor. hist. f.* 1. *t.* 3. *f.* 9. *Clus.* 2. 50. 1. *Dod.* 393. *Lob. obs.* 340. 2. *Fuchsf.* 258. *Baub. hist.* 2. 157. *Raii hist.* 725. 7. *syn.* 275. 2.

SPECIFIC CHARACTER.

Leaves sagittate, sharp on each side, peduncles commonly one-flowered, bractes awl-shaped at a distance from the flowers.

DESCRIPTION.

ROOT perennial, white, the thickness of a crow quill, creeping. Stems many, twisted, procumbent, branching. Leaves alternate, smooth. Petioles shorter than the leaves, convex below, channelled above. The bractes are at a distance from the flower, and sometimes a second or even a third flower proceeds from the bosom of them. Corolla sometimes wholly white, but frequently variegated with red; it is spreading and plaited.

OBSERVATIONS.

Small or field Bindweed is too common in gardens and arable fields, flowering sooner than the other, namely, in June and July. This does not yield to the Great or Hedge Bindweed in its property of creeping; but it is infinitely more destructive, because that keeps to the hedges for the sake of climbing, whereas this wanders over whole fields, from which it cannot be eradicated without repeated ploughing in dry weather, and burning the roots, every atom of which will grow.

Mr. Curtis has proved by an experiment, that cutting down the plants, even below the surface, only tends to spread them farther.

This species is easily distinguished from the foregoing, by the inferiority in size of all its parts, its procumbency, the tendency of the corolla to variegation, and the more important circumstances pointed out in the specific characters.



Drawn, Engraved & Published April 1890, by F. B. Nodden, N. Y. Botanical Garden, New York. Golden Square.

HORDEUM.

TRIANDRIA Digynia.

GENERIC CHARACTER.

Cal. lateral, two-valved, one-flowered, growing by threes.

SPECIES.

- *Hordeum vulgare.* *Common Spring Barley.*

Lin. spec. 125. *Hall. helv. n.* 1533. *Blackw. herb.* t. 423. *Mor. hist.* 3. 206. f. 8. t. 6. f. 3. *Mill. dict. n.* 1.

SPECIFIC CHARACTER.

All the flowers hermaphrodite and awned, in two very upright rows.

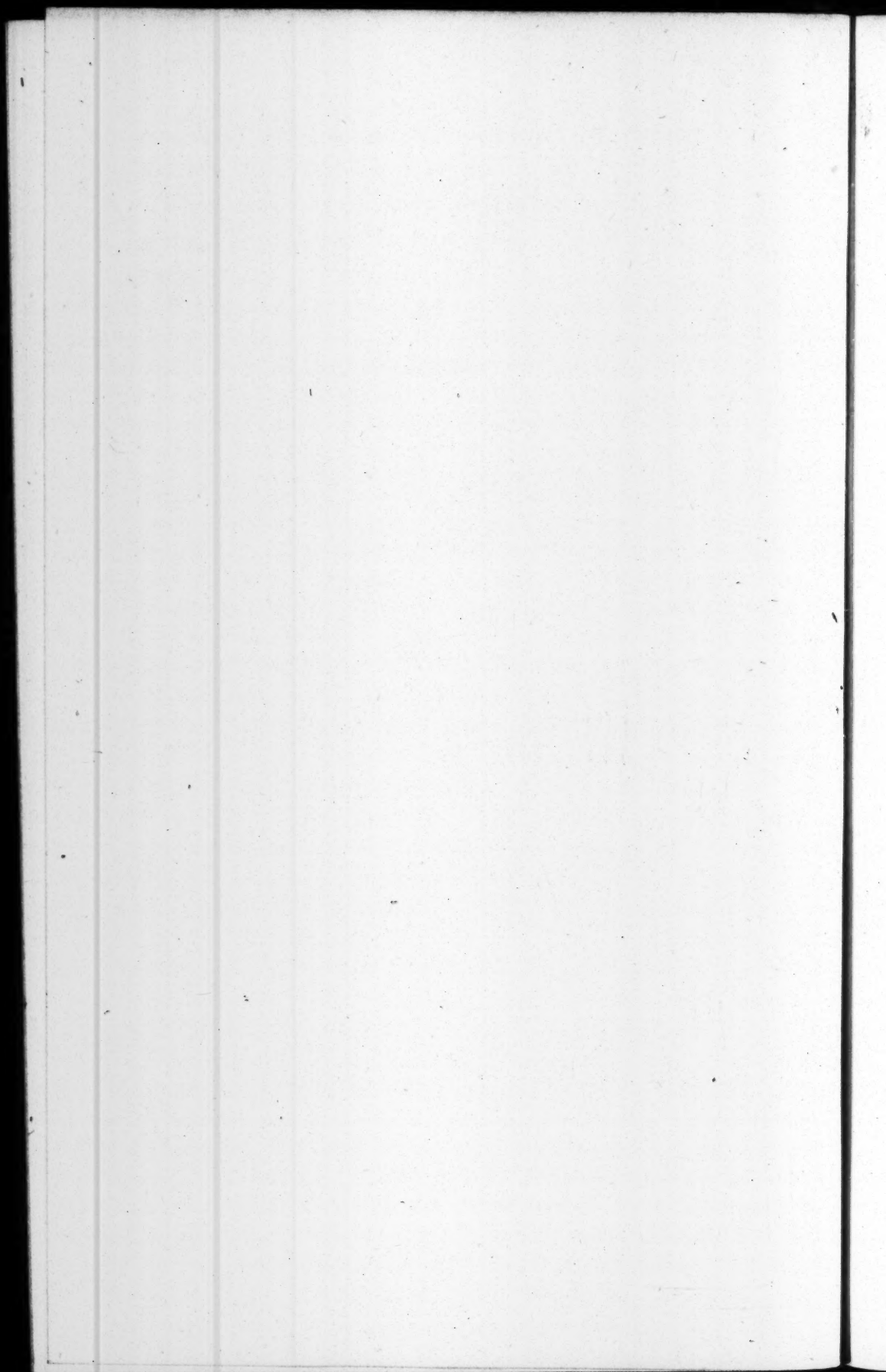
OBSERVATIONS.

IT is scarcely necessary to describe a plant so well known to the husbandman as Barley. Besides many varieties, there are several distinct species of this grain ; as this here figured : 2. *Hordeum Zeocriton*, or long-eared Barley. 3. *H. distichon*, Sprat or Battledore Barley. 4. *H. hexastichon*, Winter or Square Barley, Bear or Big.

The first and third of these are said to be found wild in

Sicily and Tartary ; but the plants so observed were probably such only as had escaped from culture.

There are several grasses which evidently belong to the same genus. Three of these have been figured in plates 43, 44, and 45.





POLYGONUM.

OCTANDRIA Trigynia.

GENERIC CHARACTER.

Calyx none. *Cor.* five-parted, calycine. *Seed* one, angular.

SPECIES.

Polygonum aviculare. Knot-grass.

Lin. spec. 519. *Huds. angl.* 171. *Wither. arr.* 413.

Curtis lond. 1. 27. *Hall. belv. n.* 1560. *Scop.*

carn. n. 471. *Pollich. pal. n.* 386. *Blackw.*

herb. t. 315. *Fl. dan. t.* 803. *Mor. hist. f. 5. t.*

29. *f. 1. row 3.* *Ger. herb.* 451. *emac.* 565.

Park. theat. 443. 1. *Baub. hist. 3.* 375. 1.

Raii hist. 184. *syn.* 146.

SPECIFIC CHARACTER.

Flowers (eight-stamened, three-styled) axillary, leaves lanceolate, stem procumbent herbaceous.

DESCRIPTION.

ROOT annual. Stems a long span, or about nine inches in length, branched, slender, streaked, smooth, round, swell-

ling a little at the joints. Leaves varying from ovate to lanceolate, and even linear, alternate, smooth. Stipules forming a sheath round the joints, membranous, white, shining, fibrous at top. Flowers two or three together, proceeding with the leaves from the sheaths of the stipules, on short peduncles.

OBSERVATIONS.

This is one of our most common plants, especially in a sandy or gravelly soil, on banks, by roads and paths, and in corn fields; it frequently covers much ground, where the natural grass has been destroyed. It has the generic name *Polygonum*, from the abundance of knots on the stem; the trivial name *aviculare* from the gratefulness of its seeds to small birds; the English name *Knot-grass*, from the knottiness of the stem, and because it is eaten by cattle, such plants having obtained the name of *Grass*, though they bear no similitude to real grasses. Hogs eat it with great avidity, and hence it is known in many counties by the name of *Hog-weed*.



Drawn, Engraved & Published May 1798 by F. P. Nodder N^o 18 Brewer Street Golden Square.

COCHLEARIA.

TETRADYNAMIA *Siliquosa.*

GENERIC CHARACTER.

Silicle or pouch emarginate or notched at the end,
turgid, rugged; valves gibbous, blunt.

SPECIES.

Cochlearia Coronopus. Swine's Cress.

Lin. spec. 904. *Huds. angl.* 284. *Wither. arr.* 680.

Hall. belv. n. 502. *Scop. carn. n.* 860. *Pollich.*

pal. n. 613. *Fl. dan. t.* 202. *Blackw. herb. t.*

120. *Mor. hist. f.* 3. *t.* 19. *f.* 9. *Ger. herb.*

340. 2. *emac.* 427. 2. *Park. theat.* 502. *f.* 2,

5. *Baub. hist.* 2. 919. 2. *Raii hist.* 843. *syn.*

304. 6.

SPECIFIC CHARACTER.

Leaves pinnatifid, stem depressed.

DESCRIPTION.

ROOT annual. Stems compressed, often depressed along the middle. Root-leaves prostrate, longer than the branches; leaflets cut along the fore edge, very entire along the back edge, the terminating one linear, very entire. Flowers very small, in racemes; petals white. Nectary, six glands, up-

right, green, blunt, as long as the anthers; four of them oblong, compressed, at the base of the claws of the petals; two cylindrical, narrower, between the longer stamens. Silicle kidney-heart-shaped, terminated by a short conical style, depressed on the sides, with furrows and sharp ridges running towards the edge, where they run out into sharpish points; one of the cells being not unfrequently empty, in which case the fertile seed expands, filling up almost the whole of the seed-vessel, and the style is bent down towards the empty cell *.

OBSERVATIONS.

This is a common weed on rubbish, by road sides, and on dunghills, flowering most part of the summer. It is acrid, and of the same genus with Scurvy-grass and Horse-radish. It was an ingredient in Mrs. Stephens's medicine for the stone.

* Stokes in Withering.



Drawn Engraved & Published May 1844 by F. P. Nodder N. 68 Brewer Street Golden Square.

ANTIRRHINUM.

DIDYNAMIA Angiospermia.

GENERIC CHARACTER.

Calyx five-leaved. *Corolla*, the base prominent downwards, nectariferous. *Capsule* two-celled.

SPECIES.

Antirrhinum Linaria. Toud-flax.

Lin. spec. 858. *Huds. angl.* 273. *Wither. arr.* 648.
Curtis lond. 1. 47. *Hall. belv. n.* 336. *Scop. carn. n.* 768. *Pollich. pal. n.* 594. *Rivin. mon.* 83. 1. *Blackw.* 115. *Mor. hist. f.* 5. t. 12. f. 10. *Ger. herb.* 440. *emac.* 550. 1. *Park. theat.* 458. 1. *Baub. hist.* 3. 456. 2. *Raii hist.* 752. 1. *syn.* 281.

SPECIFIC CHARACTER.

Leaves lanceolate-linear, crowded; stem upright; spikes terminating, sessile; flowers imbricated.

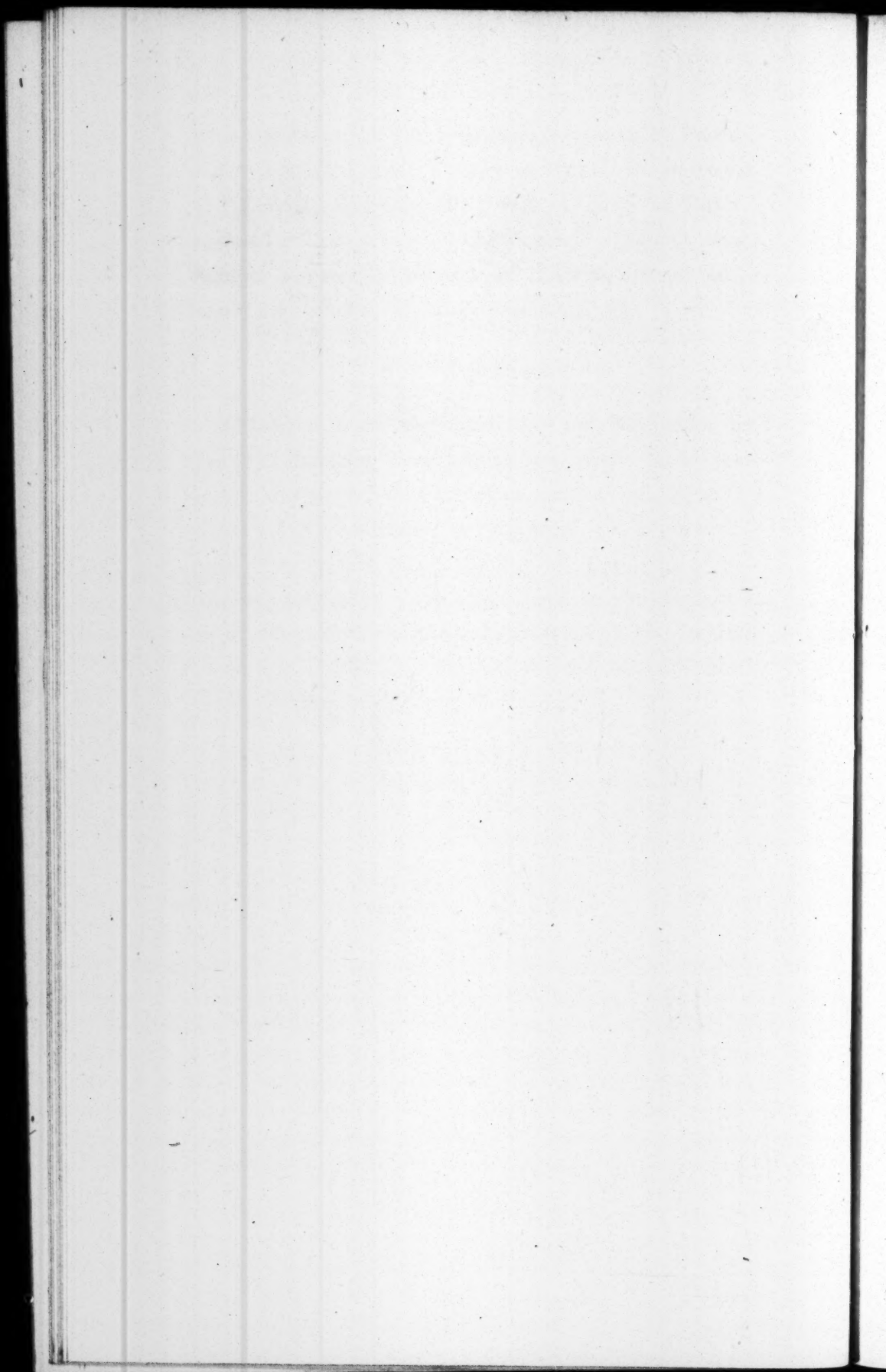
DESCRIPTION.

ROOT perennial, creeping. Stems several, from one to two feet high, leafy, round, smooth. Leaves growing very

thick together on the stem without any regular order, smooth, and of a bluish colour. Flowers in thick spikes on the top of the stems. Corolla yellow, with an orange or saffron-coloured villose palate. Nectary conical. Capsule ovate, splitting at top into several equal divisions. Seeds black, nearly flat, circular, with a shallow notch.

OBSERVATIONS.

This plant is common on banks by road sides, and in dry pastures; flowering from July to September. It has formerly been in much medical repute, and an infusion of the leaves is said to be diuretic and purgative. An ointment prepared from them with lard and the yolk of an egg is recommended in the piles. The expressed juice mixed with milk is a poison to flies. No cattle seem to eat it. In some counties it is known by the name of *Butter and eggs*, which it derives from the colour of the flowers.





Drawn, Engraved & Published June 1792, by F. P. Nodder, A. S. Brewer, Print. Golden Square.

TRIFOLIUM.

DIADELPHIA *Decandria.*

GENERIC CHARACTER.

Flowers in a sort of head. *Legume* scarcely longer than the calyx, not opening, but falling whole.

SPECIES.

Trifolium stellatum. *Star-headed Trefoil.*

Lin. syst. 689. *Wither. arr.* 799. *Murr. prodr.* 174.
Scop. carn. n. 926. *Baub. prod.* 143. *Baub. hist.* 2. 376. 2. *Mor. hist. f.* 2. t. 13. f. 9.

SPECIFIC CHARACTER.

Spikes hairy, calyxes spreading, with equal teeth, stem diffused, leaflets obcordate.

DESCRIPTION.

STEM woolly, with a few hairs. Stipules in pairs, lanceolate, lengthened out, scored, fringed with long hairs. Upper leaves opposite; leaflets oblong, slightly wedge-shaped at the base, rounded at the end, and sometimes very slightly toothed, smooth, except at the edges, and along the mid-rib

underneath. Petioles short. Peduncles longer. Heads or spikes of flowers oval. Calyx as long as the corolla, divided almost to the base; segments equal, beset at the base with white spreading hairs*.

* Withering.

2



Drawn, Engraved & Published June 1799, by F. & J. Neuberger, A. & Co. Printers, Street, Golden Square.

CARDAMINE.

TETRADYNAMIA *Siliquosa.*

GENERIC CHARACTER.

Siliqua or Pod opening elastically, the valves being then rolled back. *Stigma* entire. *Calyx* slightly gaping.

SPECIES.

Cardamine pratensis. Common Ladies' Smock.

Lin. syst. 594. *Wither. arr.* 688. *Curtis lond. fasc.*

3. *Hall. belv. n.* 473. *Scop. carn. n.* 819.

Pollich. pal. n. 621. *Blackw. t.* 223. *Ger. herb.*

201. 1, 2. *emac.* 259. 1, 2. *Park. theat.* 826.

2. & 1239. *f.* 4. *Mor. hist. f.* 3. *t.* 4. *f.* 7.

Petiv. brit. t. 47. *f.* 5. *Bauh. hist.* 2. 889. 1.

Raii hist. 814. 2.

SPECIFIC CHARACTER.

Leaves pinnate; leaflets of the root-leaves roundish, of the stem-leaves lanceolate.

DESCRIPTION.

ROOT perennial. Root-leaves on petioles from an inch to two inches in length, composed of three or four pairs of

opposite roundish leaflets, the lower pair commonly smallest, the end leaflet three-lobed and largest. On the lower stem-leaves there are six or seven pairs of ovate leaflets, placed alternately; higher up they become oblong, and finally linear: they are all ciliate round the edge: the stem-leaflets frequently terminate in a point. The root-leaflets are on short petiolules; the lower stem-leaflets are sub-sessile; and the upper ones quite so. A single corymb of about ten flowers terminates a flexuose or waving stem, which is a long span in height. Calyx yellowish green. Corolla large, purple: petals ovate, emarginate, deeply veined. Shorter filaments concealed, the anthers just emerging; the four longer ones stand considerably above the corolla.

OBSERVATIONS.

This plant is common in moist meadows, flowering in April and May. From the early season at which the flowers appear, it is one of the many plants which are known among the common people by the name of *Cuckoo-flower*. It is singular that the poets should have selected this flower as an instance of extreme whiteness, when it has always more or less a tinge of purple, at least till it has been bleached by the sun.

It is recommended in epileptic cases. Kine seldom touch it. Sheep will eat it, at least when they are first turned into a meadow or marsh.



CHÆROPHYLLUM.

PENTANDRIA Digynia.

GENERIC CHARACTER.

Involucre universal none: partial bent back, concave, five-leaved. *Petals* bent in and heart-shaped. *Fruit* oblong, even.

SPECIES.

Chærophylum sylvestre. Cow-weed.

Lin. syst. 288. *Wither. arr.* 306. *Curt. lond. fasc.* 4. *Hall. belv. n.* 748. (*Cerefolium*) *Scop. carn. n.* 366. *Pollich. pal. n.* 298. *Jacqu. austr. 2. t.* 149. *Mor. hist. f. 9. t. 11. f. 5.* *Petiv. brit. t. 25. f. 2.* *Raii hist.* 429. 1.

SPECIFIC CHARACTER.

Stem smooth to the touch, striated, swelling a little at the joints.

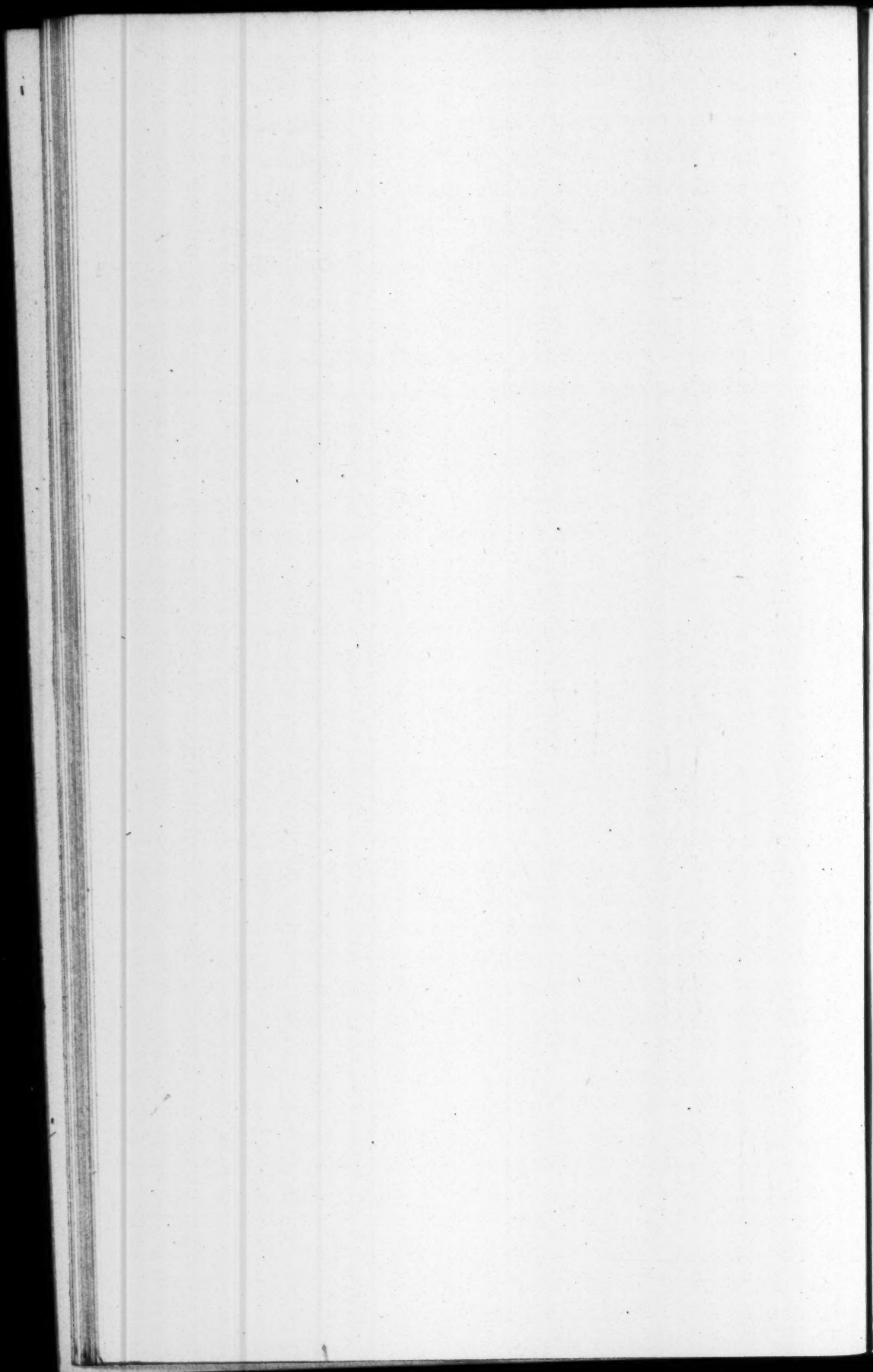
DESCRIPTION.

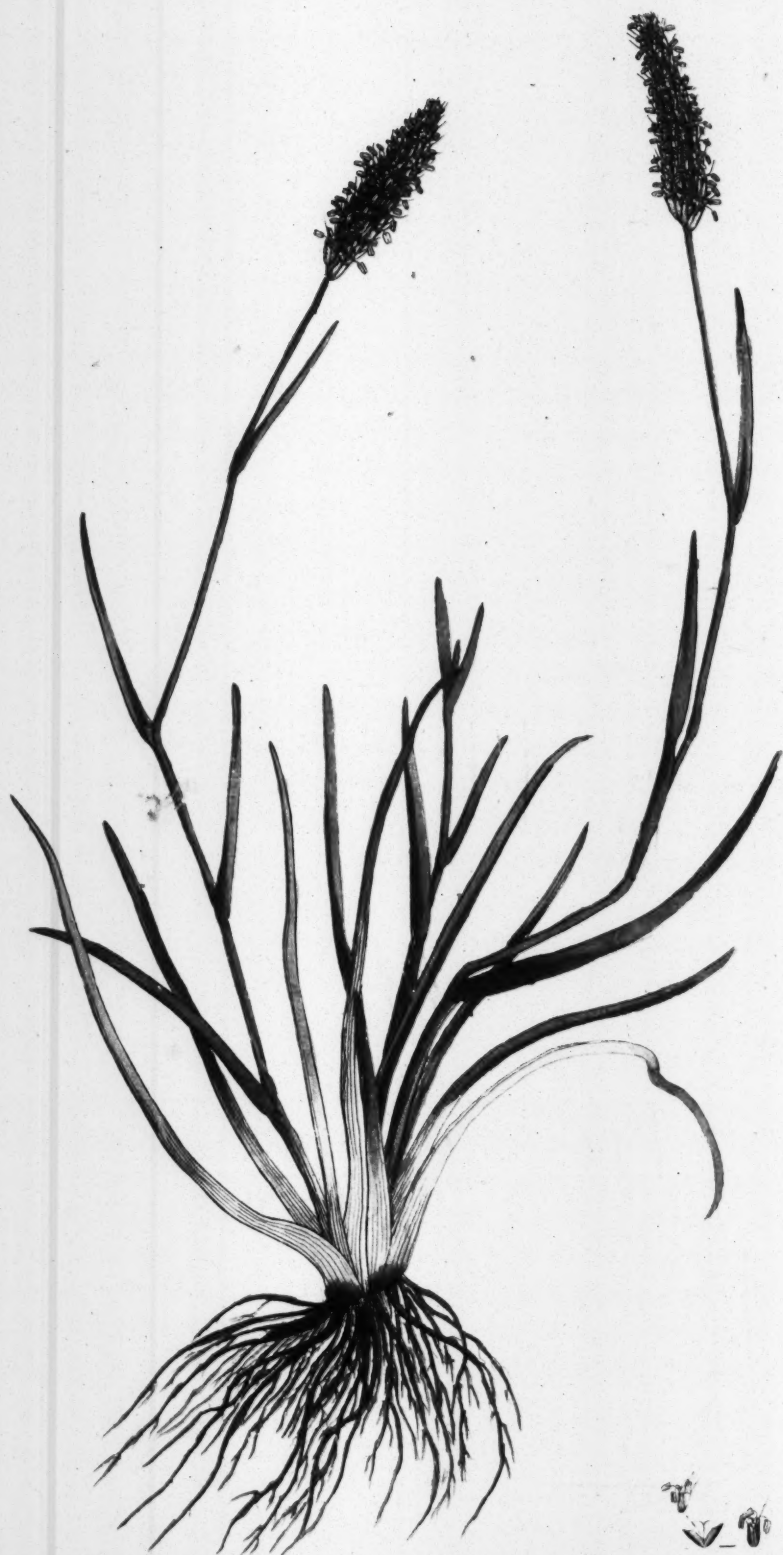
STEM grooved, hairy, commonly tinged with purple at the joints. Leaf-stalk deeply channelled. Leaves hairy on their under surface, smooth on their upper. Umbels, before they expand, nodding. Rays of the universal umbel about nine; of the partial more. Several of the central

florets barren. Leaflets of the involucre ovate-lanceolate, set with long hairs about the edge. Corolla at first yellowish, but becoming finally white. Petals entire, the inner ones gradually smaller. Fruit glossy, of an even surface, neither grooved nor striated.

OBSERVATIONS.

Cow-weed or Cow-parley, by old writers called Wild-Cicely, is very common in hedges, orchards, and pastures; flowering from April to June. It indicates good land, or at least a strong soil. Cattle are fond of it in the Spring, before it is too rank; and it is commonly given to rabbits. The roots, however, are said to be poisonous.





Drawn, Engraved & Published July 1794. by F. & P. Aitken, & Co. Booksellers, Golden Square.

ALOPECURUS.

TRIANDRIA Digynia.

GENERIC CHARACTER.

Calyx two-valved. *Corolla* one-valved.

SPECIES.

Alopecurus geniculatus. *Flote* Fox-tail grass.

Lin. spec. 89. *Huds. angl.* 27. *Wither. arr.* 60.

Curtis lond. 5. t. 6. *Fl. dan.* t. 861. *Mor. hist.*

f. 8. t. 4. *f.* 15. *Leers herborn.* t. 2. *f.* 7. *Ger.*

herb. 13. 2. *emac.* 14. 2.

SPECIFIC CHARACTER.

Culm spiked, bent at an angle; awns of the corolla concealed within the calyx.

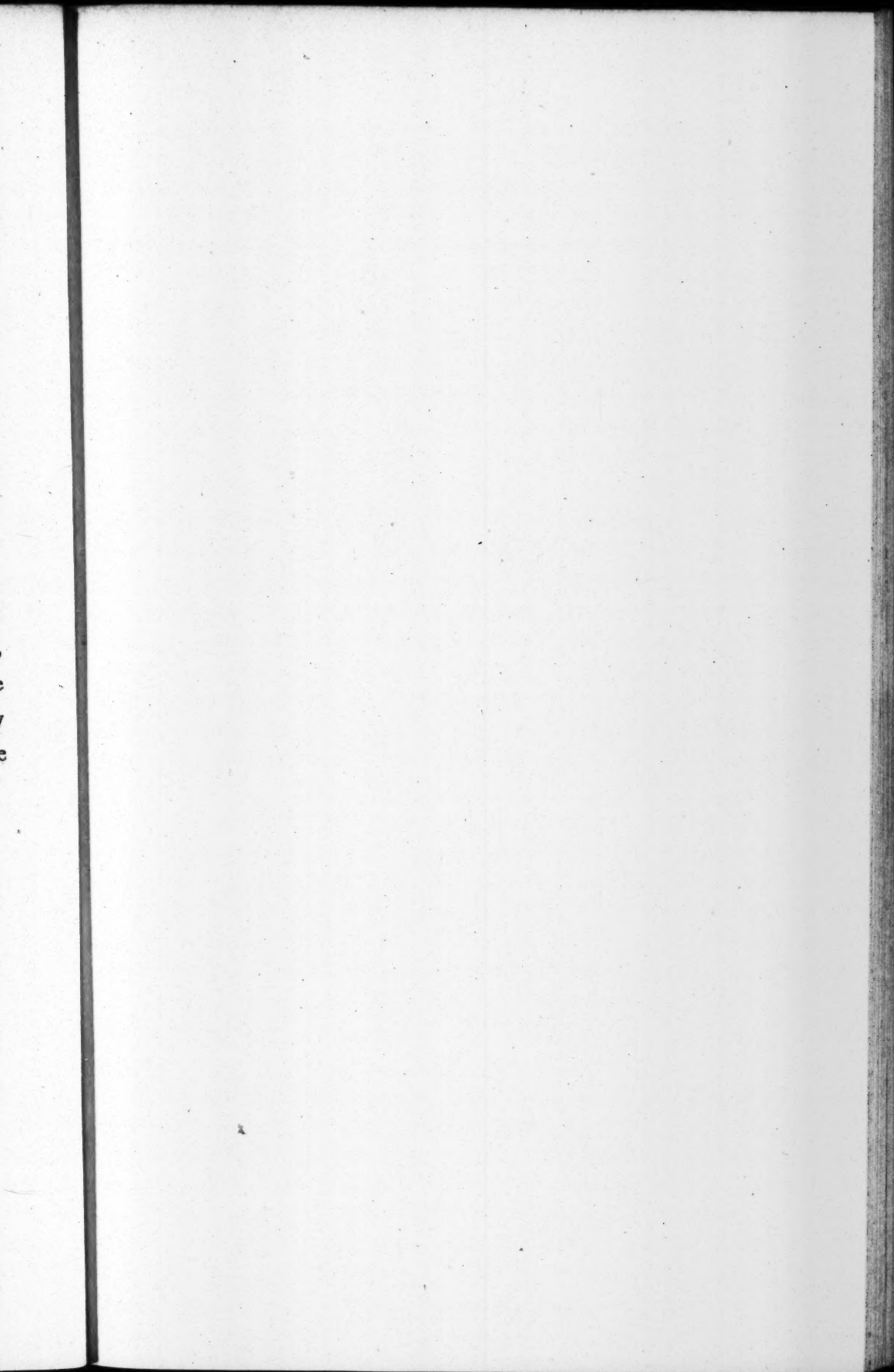
DESCRIPTION.

ROOT perennial. Stalks a foot and eighteen inches in length, or more, procumbent at bottom, and often creeping. The upper side of the leaves, if drawn backwards between the fingers, rough; the under side smooth; the uppermost leaves only an inch or two in length; ligule or strap ovate, pointed; sheath smooth, streaked, ventricose. Spike an inch or more in length, almost cylindric, varying in form and co-

lour, sometimes blunt, sometimes tapering to a point, greenish, purplish, and even appearing blackish when viewed at a distance, whence it is called in some places *Black-grass*. Valves of the calyx cut off obliquely, pubescent, three-nerved, with a ciliate keel. Valve of the corolla oblong, ovate, truncate, five-nerved, pellucid, without hairs, the awn proceeding from near the base, and twice the length of the corolla. Anthers at first purple, afterwards ferruginous.

OBSERVATIONS.

This grass is easily known, by the frequent joints of the stalk changing their direction at an angle, and thus appearing as if broken. It is common in the wet parts of meadows, and in pools, where it pushes out roots under water from the joints, and thus spreads itself much, the leaves floating on the surface. It sometimes occurs in dry pastures, and even on walls, and then grows more upright, the spike becomes more slender, and the base of the stalk frequently swells out into a kind of bulb. It flowers in June. Cattle eat it readily, but it is not a profitable grass.





Drawn, Engraved & Published July 1794, by F. P. Aitken, A.S. Brewer Lane, Golden Square.

POA.

TRIANDRIA Digynia.

GENERIC CHARACTER.

Calyx two-valved, many-flowered. *Spikelet* ovate; valvelets somewhat pointed, scariose or skinny at the edge.

SPECIES.

Poa annua. Annual Meadow-grass.

Lin. spec. 99. *Huds. angl.* 42. *Witber. arr.* 88.
Curtis lond. 1. t. 6. *Hall. belv. n.* 1466.
Scop. carn. n. 102. *Pollich. pal. n.* 91. *Leers*
herborn. n. 70. t. 6. f. 1. *Stilling. misc. t.* 7.
Mus. rust. vol. 4. t. 2. f. 8. *Mor. hist. f.* 8. t.
 5. f. 21. *Ger. emac.* 2. 1. & 3. 2. *Park. theat.*
 1156. *Scheuch. agr. t.* 3. f. 17. *E. Baub. hist.*
 2. 465. 1. 2. *Raii hist.* 1284. n. 3. *syn.* 408. 1.

SPECIFIC CHARACTER.

Panicle spreading horizontally one way; spikelets blunt; culm oblique, compressed.

DESCRIPTION.

ROOT annual, and remarkably full of fibres. Culms numerous, forming a thick tuft, about half a foot high,

(varying from less than three inches to near a foot.) Leaves very numerous, short, keeled, smooth, frequently wrinkled transversely, very finely serrate. Panicle triangular, flattish; peduncles at the bottom in pairs, one shorter than the other, from the middle often in threes, and at top single. Spikelets ovate, pointed, flattish and sharp on both sides, containing 3, 4, and sometimes 5 flowers*, having no wool at the base.

This species is distinguished from *Poa trivialis* by its general habit, its spreading panicle, its compressed reclining culms, and by its greater softness and delicacy—from *P. pratensis* and *angustifolia* by the branches proceeding from the culm in pairs, by its size, &c.† The spikelets are larger than those of *P. pratensis*‡.

OBSERVATIONS.

If *Gramen* (Grass) be so named, says Ray, *a gradiendo*, or *progradiendo*, no species better merits the name than Annual Meadow Grass. And Mr. Curtis, to whose accounts of Grasses it is difficult to add any thing new, remarks that it differs very considerably from all other annual Grasses, in continually throwing out new shoots, and producing new flowers and seeds, insomuch that if the ground be moist, a single plant will grow in this manner throughout the year, so that we generally find on the same plant young shoots and ripe seeds. It imitates, therefore, the tropical plants in this circumstance, and is perhaps the only vegetable we have that does so.

It occurs almost every where, and flowers all the year

* Curtis. † Pollich. ‡ Dickenso in With.

round, except in severe weather. The panicle frequently acquires a reddish tinge.

It appears to be one of the first general coverings which Nature has provided; and therefore is a troublesome weed in gardens, particularly in gravel walks and pavements, where Mr. Curtis recommends boiling water as the most expeditious method of destroying it.

Mr. Stillingfleet says that it makes the finest of turfs, that it is called in some parts Suffolk Grass, there being whole fields of it in High Suffolk, without any mixture of other grasses, and that it is likely to be the best grass for the dairy. Its foliage is tender and grateful to cattle, but it never acquires any great height.

May or June is the best time to gather the seed in greatest abundance; but as a single tuft of this grass may be divided into a vast number of plants, and as they grow with wonderful facility, an experiment, on a small scale at least, might be tried with it by transplanting it in moist weather.



Drawn, Engestr. & Pabst July 1904, by F. P. Veldt, N. S. Brewer's "Golden Square."

BROMUS.

TRIANDRIA Digynia.

GENERIC CHARACTER.

Calyx two-valved. *Spikelets* oblong, cylindric, distich: awn below the top.

SPECIES.

Bromus mollis. Soft Brome-grass.

Lin. spec. 112. *Huds. angl.* 48. *Wither. arr.* 105.

Relb. cant. n. 87. *Curt. lond. i. t.* 8. *Hall.*

helv. n. 1504. *Pollich. pal. n.* 110. *Leers*

herborn. n. 82. *t. ii. f. i.* *Schreb. gram.* 60.

t. 6. f. i. *Mor. hist. f. 8. t. 7. f. 18.* *Scheuch.*

agr. 254. *t. 5. f. 12.* *Raii hist.* 1289. 6. *syn.*

413. 5.

SPECIFIC CHARACTER.

Panicle rather upright, spikes ovate, pubescent, awns straight, leaves very softly villose.

DESCRIPTION.

THE whole plant is covered with soft hairs. The stalk is from one to three feet in height, and upright, with very thick joints, 5 or 6 in number. Panicle, when in fruit,

closely contracted. Spikelets ovate-pointed, turgid, having about 8 florets, or rather from 6 to 9, sometimes more, the last frequently abortive. Outer valve of the corolla slightly cloven at the end, but easily separating to the insertion of the awn, which is about half a line below the point; inner flat, and fringed at the edge with bristly hairs.

OBSERVATIONS.

It is an annual grass, comes into spike early, and has generally shed its seed before the meadows are mown. In many places it is the predominating grass. Provided it were sown by itself, it might be cultivated to advantage as an early grass. The seed being large, and the panicle containing nearly as much as that of a common oat, it is remarked by Mr. Curtis, that although cattle may not be very fond of the leaves and green panicle, yet it may perhaps contribute to render the hay more nutritive. The heaviness of the panicle, making it subject to be laid by rain, is a great objection to this grass.

According to Dr. Withering, it is known among farmers by the name of Oat-grass, and is sown with clover. We have observed it frequently to abound among Saintfoin.

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MEDICAGO.

DIADELPHIA Decandria.

GENERIC CHARACTER.

Legume compressed, screw-shaped. *Keel* bending down from the banner.

SPECIES.

Medicago arborea. *Tree Medick* or *Moon Trefoil.*
Lin. spec. 1096.

Medica arborea. *Mill. dict. n.* 7.

Cytisus Cæsalp.—*Maranthæ.* *Lob. ic.* 2. 46. *Park.*
parad. 439.---*cornutus.* *Ger. herb.* 1124. 7.
emac. 1305. 7. *Park. theat.* 1471. 1.—*incanus*
filiquis falcatis. *Baub. pin.* 389. *Raii hist.* 973.

SPECIFIC CHARACTER.

Legumes crescent-shaped, quite entire about the edge, stem arboreous.

DESCRIPTION.

THIS shrub will grow to the height of eight or ten feet, and being covered with a gray bark, the whole has a hoary appearance. The stem divides into many branches, with trifoliate leaves at each joint, on footstalks about an inch in

length; there being several of these leaves together, the whole shrub is closely covered with them; and it is never destitute of leaves: the component leaflets are small, lanceolate, and hoary on their under side. The flowers are produced on peduncles from the side of the branches, four or five together, and are of a bright yellow. The pods contain three or four small seeds.

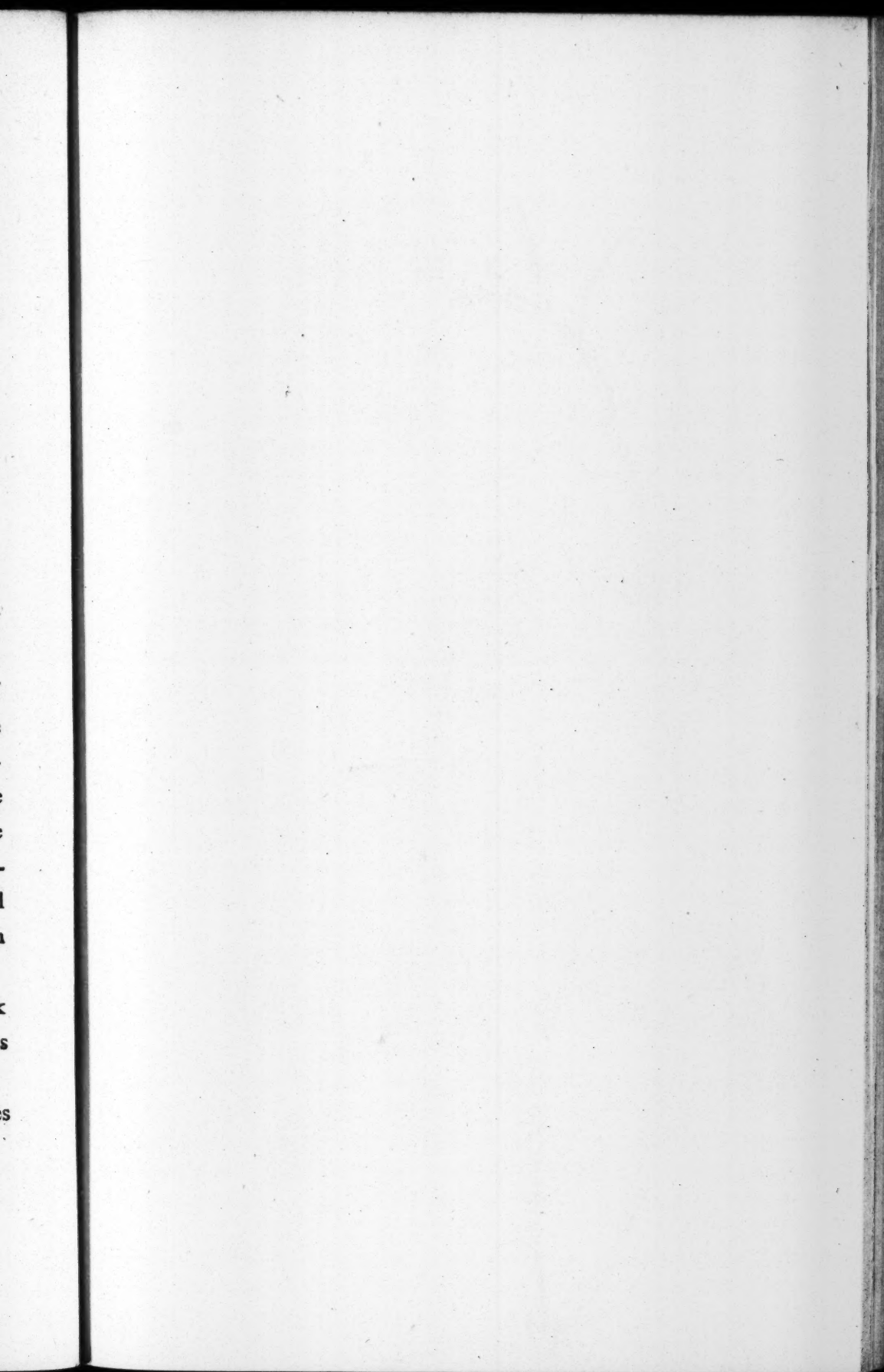
OBSERVATIONS.

Tree Medick, or as Parkinson calls it, Horned Tree Trefoil, grows wild in the vicinity of Naples and Abruzzo, and in several islands of the Archipelago.

It bids the fairest of any shrub to be the *Cytisus* of Virgil, and the Roman writers on husbandry; and being celebrated by them as an excellent fodder, has been thought worthy of cultivation here. In hot dry countries it may be of considerable use, but we have a variety of more succulent plants of this leguminous tribe: and besides, though it will bear the open air in England, yet in severe frost, even when not destroyed, it is so much damaged as not to recover its verdure before the middle or end of May, so that it would seldom be of much use for early Spring fodder. This Spring, remarkable for its mildness, after a Winter without frost, the small shoots were much cut, and appeared very ragged in the month of May.

In old shrubs the heart of the wood is said to be of a dark colour, and hard like ebony. The Turks make the handles of their sabres, and the Greek monks their beads with it.

For other species of *Medicago*, already figured, see plates 48, 76, 86, 87.





SINAPIS.

TETRADYNAMIA *Siliquosa.*

GENERIC CHARACTER.

Calyx spreading. *Corolla* with upright claws.
Glands as in *Brassica*.

SPECIES.

Sinapis arvensis. Charlock, or Wild Mustard.

Lin. spec. 933. *Huds. angl.* 298. *Witber. arr.* 712.
Curt. lond. 5. 47. 321. *Lightf. scot.* 360. *Relb.*
cant. n. 493. *Hall. helv. n.* 467. *Scop. carn.*
n. 842. *Pollich. pal. n.* 642. *Fl. dan. t.* 753.
Ger. herb. 190. *emac.* 233. 2. *Park. theat.*
 862. 3. *Mor. hist. f.* 3. *t.* 3. *f.* 7. *Petiv. brit.*
t. 45. *f.* 12. *Bauh. hist.* 2. 844. *Raii hist.* 802.
1. syn. 295. 2.

SPECIFIC CHARACTER.

Pods with many angles, swollen out in bunches by
 the seeds, longer than the ancipital or two-
 edged beak.

DESCRIPTION.

ROOT annual. Stem from nine inches or a foot to a
 foot and a half in height, upright, round, striated or grooved,

rough with a few stiff hairs, commonly much branched, and the branches spreading. Leaves deeply and irregularly indented and serrated, sometimes entire, but most frequently jagged at the base, and sometimes pinnatifid; they are always harsh or rugged, and have not any cast of sea-green. Flowers at the ends of the stalk and branches, on peduncles the length of the calyx, and slightly hispid. Calyx yellow, half as long as the corolla, standing open at the top. Corolla always yellow. Pods scarce perceptibly angular, sometimes smooth, sometimes slightly hairy, swelling, ending in a short beak. Seeds dark brown, shining, 8 or 9 in a pod.

OBSERVATIONS.

Charlock flowers in May and June, and has perfected its seeds before harvest; it is therefore very abundant in Spring corn. Being an annual, it may be destroyed, or at least checked, by Spring feeding with sheep, or by weeding with the hook, to prevent its flowering. The seed will lie for ever in the ground, till turned up within the sphere of vegetation.

Its classical name in English is Wild Mustard; but it is known among husbandmen by the names of Charlock, Carlock, Garlock, Chadlock, Cadlock, and Kedlock; all evidently the same name originally, but variously pronounced in different counties. We find the last in Fitzherbert, and our other oldest English writers. In some parts of Yorkshire it is called Runsh.

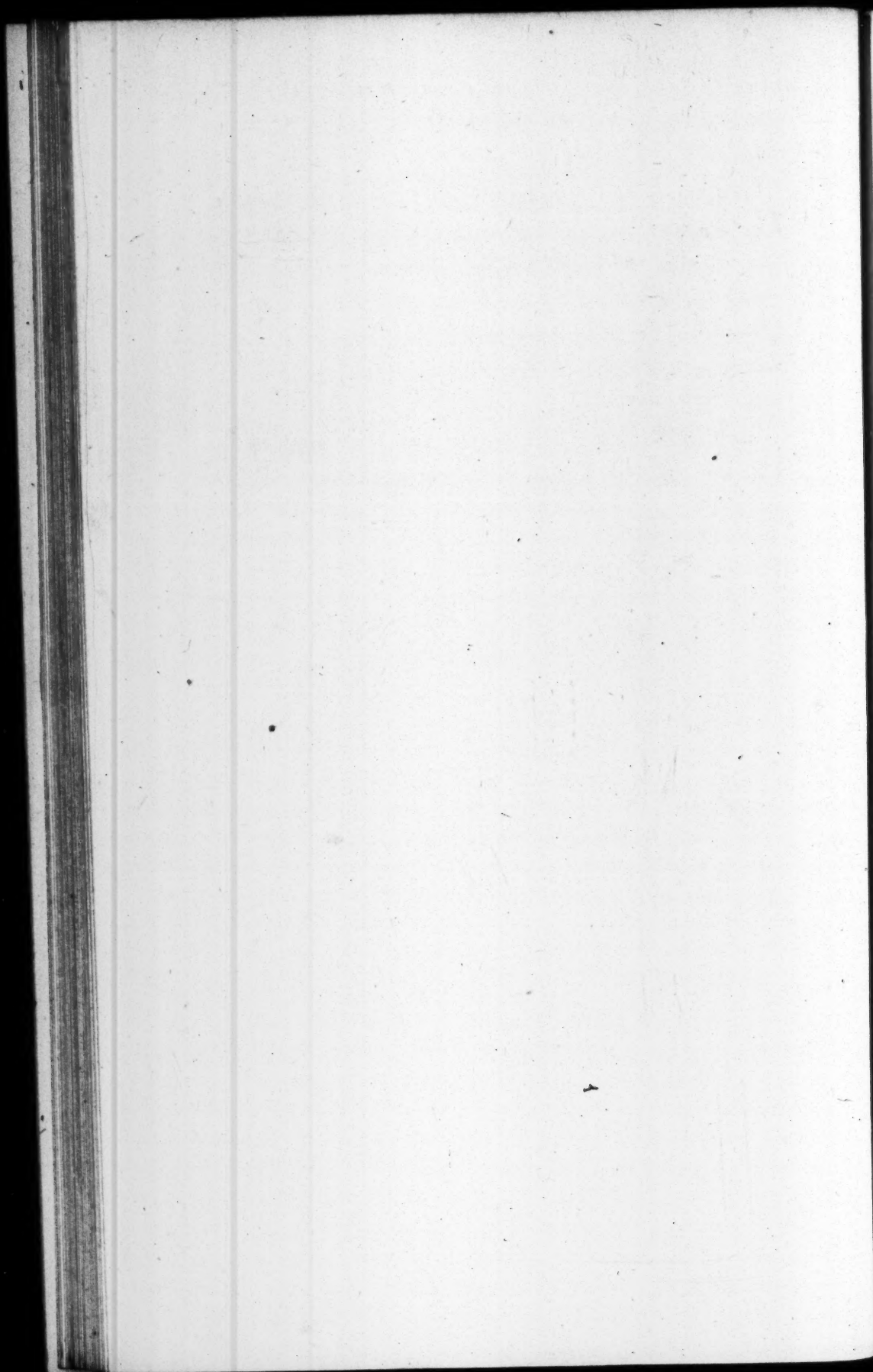
The young plants, and particularly the tender tops, before they flower, are boiled and eaten as greens by husbandmen in many countries.

Mr. Miller affirms, that it is the seed of this species,

which is commonly sold under the title of Durham Mustard seed.

The young plants may be mistaken for turneps. As they grow up they vary in many circumstances. The stem is sometimes wholly green, but more frequently tinged with red. Among corn it is more drawn up, and often scarcely branched. The leaves vary much in form and degree of division. And the plant differs in height and degree of hairiness.

For the distinctions between this and Black and White Mustard, and Wild Radish, see plates 51, 70, and 71.





Drawn, Engraved & Published Aug^r 1792 by F. R. Nodder N^o 15 Brewer's Street Golden Square.

FESTUCA.

TRIANDRIA Digynia.

GENERIC CHARACTER.

Calyx two-valved. *Spikelets* oblong, roundish, with acuminate glumes.

SPECIES.

Festuca ovina. *Sheep's Fescue.*

Lin. spec. 108. *fl. suec. n.* 91. *Huds. angl.* 44. *Wither. arr.* 97. *Hall. helv. n.* 1442. *Pollich. pal. n.* 101. *Leers herborn. n.* 74. *t.* 8. *f.* 3, 4. *Stilling. misc. t.* 8. *Mus. rust. vol.* 4. *t.* 2. *f.* 4. *Anderson's essays, vol.* 2. *t.* 4. *Mor. hist. f.* 8. *t.* 3. *f.* 13. *Raii hist.* 1288. *n.* 33. *syn.* 410. 9. *Curtis pract.* 25.

SPECIFIC CHARACTER.

Panicle directed to one side, contracted, awned, culm four-cornered, almost naked, leaves bristle-shaped.

DESCRIPTION.

ROOT perennial. Culm scarcely exceeding six inches in height, somewhat angular, with two or three coloured joints. Root-leaves hairy; stem-leaves smooth. Lower

spikelets peduncled, linear, four-flowered, with the rudiment of a fifth; or, according to Mr. Hudson, 3 to 6 floscules in each spikelet. Glumes unequal, the larger ovate, the smaller sharp or acuminate, but seldom properly awned.

OBSERVATIONS.

Sheep's Fescue is found chiefly on dry sandy soils, and in elevated situations. It has been much celebrated for feeding sheep, since Linneus affirmed that they have no relish for hills and heaths that are without it; and Gmelin said, that the Tartars fix during Summer where there is the greatest plenty of it. Mr. Stillingfleet observed it on all our finest sheep pastures or downs. A learned writer of ours asks, whether the superiority of the Spanish and English wool may not be owing to the abundance of this grass in the hilly pastures? And another does not scruple to affirm, that it is capable of affording an immense quantity of hay, and promises to be one of the most valuable grasses our country produces, and to make a most important acquisition to the farmer.

What culture may do we know not, but naturally its foliage is hard and wiry, and its produce very trifling.* Mr. Curtis affirms, that even in a rich moist soil it is still a small plant, and unproductive, and consequently that it can never have any pretensions to be considered as fit for a hay grass. He recommends it as peculiarly adapted to forming a fine grass plat.

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Brassica, longicaulis - Published Sept. 1794, by F. & J. Nees, Vasa Botanicorum, Golden Square.

BRASSICA.

SPECIES.

Brassica Napus. Rape or Cole-seed.

Lin. spec. 931. *Huds. angl.* 290. *Wither. arr.* 707.

Blackw. t. 224. *Mor. bist. f.* 3. t. 2. f. two

last. *Ger. herb.* 181. 1, 2. *emac.* 235. 1, 2.

Raii bist. 801.

SPECIFIC CHARACTER.

Root stalky, fusiform.

DESCRIPTION.

ROOT biennial. Stem branched, cylindrical, smooth, from a foot to two feet in height. Root-leaves lyrate, almost smooth, divided into deeply pinnate lobes, which are again irregularly indented or sinuated on the edges. Stem-leaves smooth, glaucous, sessile, stem-clasping, oblong-heart-shaped, very slightly toothed on the edges. Calyx yellowish green, spreading. The pods have frequently three or four warty excrescences on them.

OBSERVATIONS.

Linneus says, that the Navew grows wild on the sandy shores of Gotland, Holland, and England: with us it is found among corn, and on ditch banks.

It is much cultivated, under the names of Rape and Cole-feed, in the ille of Ely and other parts of England, for its seed, from which Rape Oil is drawn ; and for feeding cattle. What remains after the oil is expressed, is called oil-cake or rape-cake, and is a very efficacious manure. It is not this, but the lint-cake, or residue of flax-feed used in making lint-feed oil, that is used in fatting beasts.

For the generic character see p. and t. 49.

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GALIUM.

TETRANDRIA Monogynia.

GENERIC CHARACTER.

Corolla one-petalled, flat. *Seeds* two, roundish.

SPECIES.

Galium Aparine. *Cleavers*, or *Goose-grafs*.

Lin. spec. 157. *Huds. angl.* 70. *Wither. arr.* 157.

Curt. lond. 2. *t.* 9. *Hall. helv.* n. 723. *Scop.*

carn. n. 157. *Pollich. pal.* n. 157. *Leers her-*

born. n. 117. *Krock. files.* n. 230. *Fl. dan. t.*

495. *Blackw. t.* 39. *Ger. herb.* 963. *i. emac.*

1122. *i.* *Park. theat.* 567. *Mor. hist. f.* 9. *t.*

22. *f. i.* *Petiv. brit. t.* 30. *f. ii.* *Raii hist.*

484. *syn.* 225.

SPECIFIC CHARACTER.

Leaves eight in a whorl lanceolate, keel rugged,
with prickles pointing backwards, joints
villose.

DESCRIPTION.

ROOT annual. Stem four feet high or more, with many
opposite branches, weak and supporting itself on other
plants, the angles set with pellucid hairs pointing down-

wards Leaves in the lower whorls of the stem 8, in the upper 6, on the branches from 6 to 3, 2 and even 1, lanceolate-linear, terminating in an awn, the upper surface rugged, the lower smooth. Flowers few, small, on rough peduncles. Corolla whitish, divided to the base into four ovate acute segments. Styles shorter than the corolla, standing wide asunder. Fruit set with hooked bristles.

OBSERVATIONS.

This plant is very common in hedges and cultivated grounds, flowering from May and June through the Summer, and part of the Autumn. Its well-known property of adhering to whatever it comes in contact with, has acquired it the name of *Cleavers* or *Clivers*, and *Catchweed* or *Scratchweed*; from its roughness it is called *Hariff*; and from being a favourite food or medicine for Geese, *Goose-grass*, *Goose-share*, and *Gosling-weed*.

The ancients used it as a filtre to take out hairs from the milk; in Sweden they still use it for the same purpose. It is reckoned to purify the blood, and for that purpose the tops are an ingredient in Spring broth. The expressed juice taken to the amount of four ounces, or a quarter of a pint, night and morning, during several weeks, is very efficacious in removing many of those cutaneous eruptions which are improperly called scorbutic. The roots will dye a fine red colour, like madder. These good qualities may in some degree reconcile this importunate weed to the husbandman; a weed which will entirely over-grow and choke his young quickset hedges. Being annual, however, it is easily destroyed, if it be cut or plucked up early; for it begins to seed in June.



Drawn, Engraved & Published, Sep: 79, by F. P. Nodder, & Co. 15, Bouverie Street, Golden Square.

AGROSTEMMA.

DECANDRIA *Pentagynia*.

GENERIC CHARACTER.

Cal. one-leafed, coriaceous. *Petals* five, with claws; border blunt, undivided.

SPECIES.

Agrostemma Githago. *Corn Campion*, or *Cockle*.

Lin. spec. 624. *Huds. angl.* 198. *Wither. arr.* 471.

Curt. lond. 3. 27. *Fl. dan. t.* 576. *Hall. belv.*

n. 926. *Scop. carn. n.* 527. *Pollich. pal. n.*

436. *Mor. hist. f. 5. t. 21. f. 31.* *Ger. herb.*

926. *emac.* 1087. *Park. theat.* 632. 9. *Raii*

hist. 998.

SPECIFIC CHARACTER.

Plant hirsute, calyx longer than the corolla, petals entire or slightly emarginate, and naked.

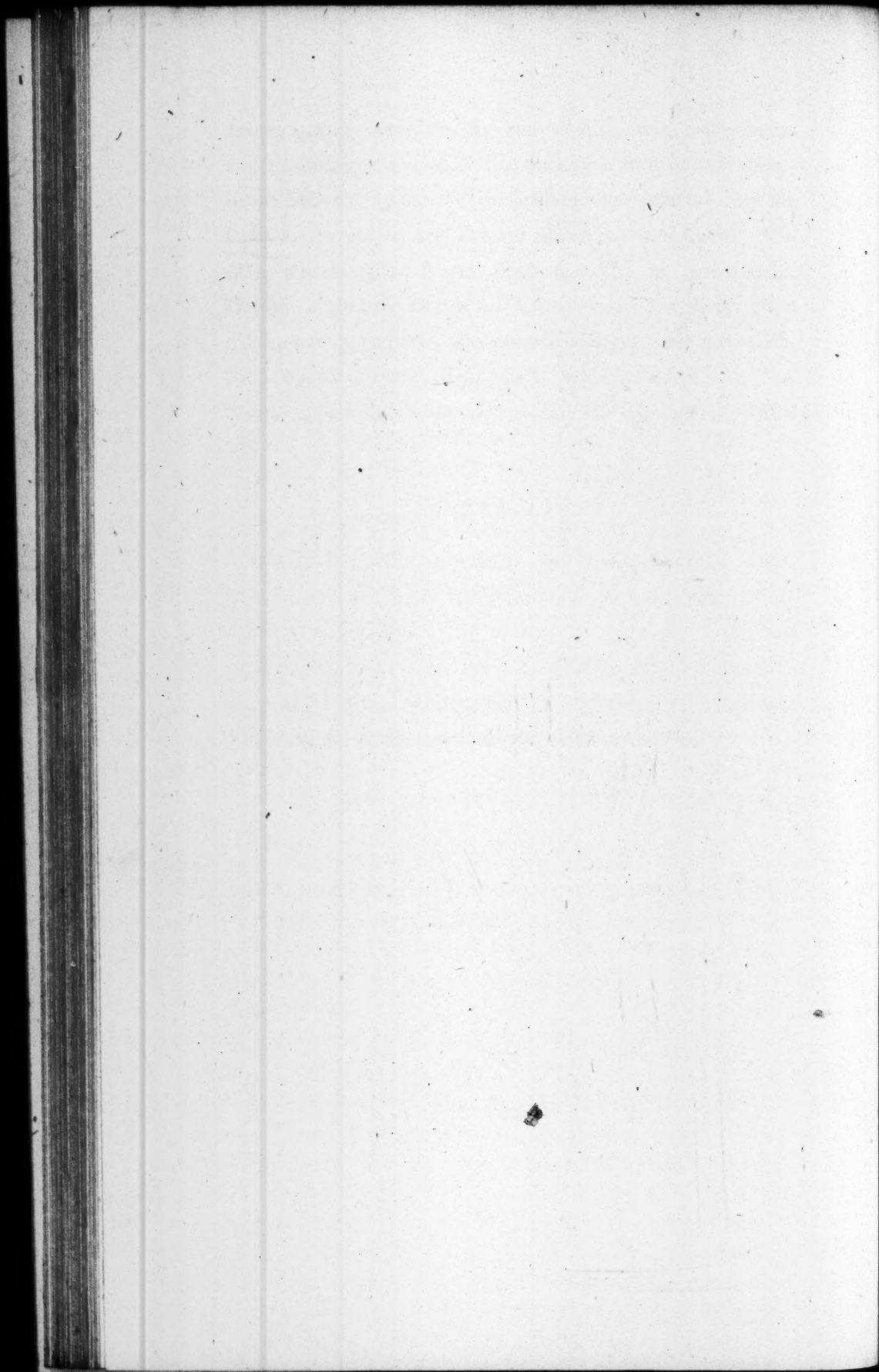
DESCRIPTION.

ROOT annual. Stem upright, two feet high, branched at top. Leaves oblong-lanceolate, keeled, connate, hairy on both sides. Calyx deeply grooved, angular, hairy; the segments lanceolate, with a prominent midrib. Petals large,

showy purple obcordate, the base whitish, with a few interrupted dark green veins. The nectary is formed by a membrane under the germ. Five filaments are inserted into the bases of the petals, and five are placed between them. Anthers pale purple, shaped somewhat like an arrow-head. Capsule almost the size of an acorn, covered with its dried calyx, having ten ribs, the mouth splitting into five teeth. Seeds obovate, compressed, black, with a surface like shagreen, appearing in the microscope like a hedge-hog rolled up.

OBSERVATIONS.

Cockle is a common weed in corn fields, enlivening them, in concert with Poppy and Blue-bottle, at the expence of the careless husbandman. It flowers in June and July, and perfects its seed before harvest. The seeds being almost as large as the grain, will not pass through the sieve. It should be pulled out by hand before it perfects the flower.



CYNOSURUS.

TRIANDRIA Digynia.

GENERIC CHARACTER.

Cal. two-valved, containing several florets (generally only two). Proper receptacle leafy, fixed to one side.

SPECIES.

Cynofurus cristatus. *Crested Dog's-tail grass.*

Lin. spec. 105. *Huds. angl.* 59. *Wither. arr.* 95.

Hall. herb. n. 1545. *Pollich. pal. n.* 99. *Leers*

herborn. n. 99. *t.* 7. *f.* 4. *Krock. files. n.* 149.

Schreb. gram. 69. *t.* 8. *f.* 1. *Fl. dan. t.* 238.

Stilling. misc. t. 11. *Curt. pract. obs. t.* 6. *Mus.*

rust. vol. 4. *t.* 2. *f.* 2. *Anderson, t.* 10.

Phleum cristatum. *Scop. carn. n.* 81.

Gramen cristatum. *Baub. hist.* 2. 468. 3. *Raii*

hist. 1269. *syn,* 398.—*anglicum.* *Park. theat.*

1159. *f.* 1160. 3.

Gr. pratense cristatum. *Baub. pin.* 3. 1. *prodr.* 8.

Scheuch. agr. 79. *t.* 2. *f.* 8. *A. C. Mor. hist.*

f. 8. *t.* 4. *f.* 6.

SPECIFIC CHARACTER.

Bractes pinnatifid.

DESCRIPTION.

ROOT perennial. Culms from one to two feet high, upright and stiff, having three or four joints. Leaves narrow, flat, smooth on both sides, but roughish along the edge; with smooth streaked sheaths, ending in a short truncate strap. Spike compound, when in flower semi-cylindric, blunt, all the florets facing one way; when out of flower interrupted. Each spikelet has commonly two, sometimes three, florets. The smaller valve of the corolla ends in two points, and the larger one in an awn scarcely a quarter of a line in length. This grass is immediately distinguished by the pectinate or comb-like bractes.

OBSERVATIONS.

It is common on downs and in dry pastures, flowering in July and August. From its running much to stalk, and having comparatively few leaves, it is known to the country people by the name of *Bent-grass*; but this, we apprehend, it has in common with several others. Dr. Anderson says, it is called *Windlestraw-grass* in Scotland.

Several modern writers, echoing Stillingfleet, have celebrated this grass as excellent for sheep. It is certainly predominant on sheep-downs and in some parks; but it is late and unproductive. Mr. Curtis therefore justly considers it as inferior to many other grasses.



Linna. Engraved & Published Oct. 1791 by F. & R. Nodder, 12, Brewer Street, Golden Square.

SPECIES.

Hordeum hexastichon. Winter or Square Barley,
Bear Barley or Big.

Lin. spec. 125. *Hall. helv. n.* 1534. *Baub. hist.* 2.
129. *Baub. theat.* 439. *Mor. hist. f.* 8. *t.* 6.
f. 3. *Raii hist.* 1244. *syn.* 388. *Park. theat.*
1130. *f.* 2. *Mill. dict. n.* 4.

SPECIFIC CHARACTER.

All the flowers hermaphrodite and awned, in six rows.

DESCRIPTION.

THE spike is much thicker than in common Barley, hence probably the name of *Big*; but it is much shorter: the number of grains, however, in an ear is greater, in the proportion of at least three to two. We have counted forty-two grains when the common Barley had only twenty-two. The ear is seldom more than two inches in length; it is square, with two rows of grains on two of the sides; on the other two a single row of grains runs up the middle; so that the former are awned only laterally, and the latter laterally and along the middle also. The lower flowers are imperfect in both. The outer valve of the corolla has a rough awn or bard, from four to six inches in length.

OBSERVATIONS.

This is feldom cultivated in the southern parts of England ; the grain, though large and plump, not being esteemed so good for malting as common Spring Barley : but in the northern counties, and in Scotland, it is generally sown, because it will bear the cold much better.

For the generic character, see p. and t. 90.



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SPECIES.

Hordeum pratense. *Rie-grafs.*

Hudf. angl. 56. *Witber. arr.* 126. *Hall. belv. n.*

1538. *Villars. dauph.* 2. 174. *Fl. dan. t.* 630.

Vaill. par. t. 17. *f.* 6. *Mor. hist. f.* 8. *t.* 2.

row. i. f. 6. *Park. theat.* 1144. 7.

Gramen fecalinum. *Raii hist.* 1258. *syn.* 392.

Hordeum murinum. β . *Lin. spec.* 126.

SPECIFIC CHARACTER.

Lateral florets male and awned, involucre bristle-shaped, rugged.

DESCRIPTION.

THIS has been commonly supposed to be nothing more than a variety of the Wall Barley-grass, figured in plate 43. But Mr. Ray observed long since that it differs, in being much taller, and having shorter spikes and awns. Its height is almost double that of the other. The spike is more green, only half the length of that, square, with the awns of the calyx as long as those of the corolla. The anthers also are three times as long, and yellow; whereas those of *Hordeum murinum* are almost square and bluish. The middle floret is smooth; the two lateral ones, though they have a pistil as well as stamens, are very minute, and never come to maturity.

OBSERVATIONS.

Rie-grass is not uncommon in good meadows, and sometimes forms a considerable portion of them. We once saw a clean crop sown of this grass, and it appeared to be a good one. One objection to this grass is its lateness, and it is not thought to be so productive as some others.

For the generic character, see 43 and 90. Compare also with this the three grasses engraved in plates 43, 44, and 45.



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